

STATE WATER RESOURCES CONTROL BOARD

PUBLIC HEARING ON AMENDED JOINT PETITION OF THE
IMPERIAL IRRIGATION DISTRICT AND THE SAN DIEGO COUNTY WATER
AUTHORITY FOR APPROVAL OF A LONG-TERM TRANSFER OF CONSERVED
WATER PURSUANT TO AN AGREEMENT BETWEEN IID AND SDCWA, AND
APPROVAL OF CHANGES IN POINT OF DIVERSION, PLACE OF USE AND
PURPOSE OF USE UNDER PERMIT NO. 7643 (APPLICATION 7482).

WEDNESDAY, APRIL 24, 2002
9:00 A.M.

CAL EPA BUILDING
SIERRA HEARING ROOM
SACRAMENTO, CALIFORNIA

REPORTED BY:

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CSR 1564

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SACRAMENTO, CALIFORNIA

WEDNESDAY, APRIL 24, 2002, 9:00 A.M.

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CHAIRMAN BAGGETT: Good morning. Let's continue with Imperial Irrigation District's case in chief.

MR. OSIAS: I would like to call our panel of two economists, Mr. Jim Merchant and Dr. Rodney Smith.

I don't believe Mr. Merchant was in the hearing room when you administered the oath.

MR. MERCHANT: I was not.

(Oath administered by Chairman Baggett.)

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CONTINUED DIRECT EXAMINATION OF

IMPERIAL IRRIGATION DISTRICT

BY MR. OSIAS

MR. OSIAS: Mr. Merchant, could you give us a very brief summary of your educational background?

MR. MERCHANT: Yes. I have a degree in economics from the University of Kansas where I graduated with honors and Phi Beta Kappa. I have a MBA and JD degree from Stanford.

MR. OSIAS: Did you prepare a report for Imperial Irrigation District?

DR. MERCHANT: I did.

MR. OSIAS: Is that in front of you?

DR. MERCHANT: It is.

1 MR. OSIAS: That is IID Exhibit 6.
2 You also prepared testimony?
3 DR. MERCHANT: Yes.
4 MR. OSIAS: You signed that testimony under penalty of
5 perjury.
6 DR. MERCHANT: I did.
7 MR. OSIAS: That's your complete testimony which
8 attaches your report; is that correct?
9 DR. MERCHANT: That's correct.
10 MR. OSIAS: What question were you asked to analyze?
11 MR. MERCHANT: I was asked to investigate whether IID
12 growers might have the ability to pass through any cost
13 increases to the buyers of their products, cost increases
14 from being asked to conserve water without being reimbursed
15 for that conservation.
16 MR. OSIAS: And you obtained an answer, derived an
17 answer to that question?
18 DR. MERCHANT: I did.
19 MR. OSIAS: What is that answer?
20 MR. MERCHANT: It is my opinion that they do not have
21 the market power that would allow them to pass any cost
22 increases on to their buyers.
23 MR. OSIAS: Therefore, if they did conservation without
24 outside payments, they would have to absorb those costs
25 rather than pass them through?

1 DR. MERCHANT: That is true.

2 MR. OSIAS: Dr. Smith, could you briefly tell us your
3 background?

4 DR. SMITH: Yes. My name is Rodney Smith. I graduated
5 from UCLA with a Bachelor of Arts in economics and also Phi
6 Beta Kappa.

7 MR. OSIAS: Anyone else is Phi Beta Kappa?

8 DR. SMITH: I received my Ph.D. in economics from the
9 University of Chicago. And since -- actually before
10 receiving my degree, I went to the Rand Corporation, a think
11 tank in Santa Monica, started working on water issues
12 including the early participant in the Rand study for the
13 California Legislature on water issues and development of
14 markets. Later went on to return to the graduate school of
15 business at the University of Chicago, initially a research
16 fellow, later Associate Director of research institute
17 headed by George Stigler, Noble Laureate in economics. Then
18 returned to California in early '80s, was professor of
19 economics at Claremont McKenne College, director of research
20 at a few institutes there before joining the private sector
21 full time.

22 MR. OSIAS: Could you briefly describe the consulting
23 experience you have on projects related to California water?

24 DR. SMITH: Over the years I've had many private and
25 public sector clients related to water marketing, water

1 investments, water conservation, asset acquisitions.
2 Amongst public sector clients I participate on Retrospective
3 of the drought water bank by Department of Water Resources,
4 as Steve Macaulay testified about yesterday, and, of course,
5 I have a long-term relationship with Imperial Irrigation
6 District.

7 MR. OSIAS: You were retained by Imperial for this
8 hearing to testify, correct?

9 DR. SMITH: That is true.

10 MR. OSIAS: Ant to prepare some reports?

11 DR. SMITH: Correct.

12 MR. OSIAS: What questions were you asked to prepare
13 reports with respect to?

14 DR. SMITH: Sure. I was asked to address three issues.
15 First of which was to explain why IID's use of Colorado
16 River water varies over time. Second, to address what are
17 the economic costs of conservation as well as the economic
18 consequences of uncompensated conservation, and, thirdly, to
19 address the benefits, if you will, as well as the
20 consequences of the failures of these proposed transactions
21 to go through on schedule.

22 MR. OSIAS: With respect to the first question, water
23 use fluctuations, you have behind you the exhibit that we
24 had up yesterday that shows the history of IID use.
25 You are familiar with that exhibit?

1 DR. SMITH: Yes.

2 MR. OSIAS: What did you conclude with respect to why
3 there is such significant variation in IID water use?

4 DR. SMITH: Annual variations in IID's water use
5 reflect fundamental conditions of rainfall, salinity,
6 cropping patterns, development of different types of crops
7 over time, economic conditions in crop markets as well as
8 salinity of Colorado River water.

9 MR. ROSSMANN: You did that analysis using statistical
10 tools?

11 DR. SMITH: Yes. What I did is I started to study the
12 historic record from 1964 onward through 2000, a portion of
13 the chart here, as well as obtained information on the
14 various factors I outlined from either IID staff or Dornbush
15 & Associates as specified in my report, which is Attachment
16 B to Exhibit 4.

17 MR. OSIAS: Thank you.

18 And if you would look to Page 20 of Exhibit B --

19 Do you have extras of those here?

20 DR. SMITH: I think they are in that.

21 MR. OSIAS: They are in the report on Page 20, Exhibit
22 B to IID Exhibit 4. If anyone needs a handy one to look at,
23 we have it.

24 Could you explain this graphic with respect to your
25 conclusion on this question of water use fluctuation?

1 DR. SMITH: Sure. In this graph the solid line is
2 indeed the same data that is on the chart behind me, which
3 is IID's net use of Colorado River water annually from 1964
4 to the year 2000, as reflected in the Decree accounting
5 records and provided to me by U.S. Bureau of
6 Reclamation. And the dotted line reflects what would be the
7 net use of water that would be predicted, based on the
8 estimated relationship between IID's use and rainfall,
9 cropping patterns, economic conditions and salinity.

10 As you can see visually, the statistical model tracks
11 the up and downs, fluctuations quite closely. And my report
12 goes into more detail on the technical statistical test to
13 establish the validity of the model.

14 MR. OSIAS: Now, Dr. Smith, you were here yesterday
15 when the question was asked about the 3.1 million acre-foot
16 cap?

17 DR. SMITH: Yes.

18 MR. OSIAS: We can see both from your exhibit and the
19 bigger exhibit behind you for the longer period, that the
20 use has fluctuated both above and below the 3.1.

21 Are you familiar with how the 3.1 million acre-foot cap
22 was derived?

23 DR. SMITH: Yes, I am.

24 MR. OSIAS: Under what circumstances, do you know the
25 answer to that question?

1 DR. SMITH: Well, as part of my advisory work to
2 Imperial, I was part of the analysis and preparation of the
3 settlement offer to Coachella.

4 MR. OSIAS: Did you also attend negotiating sessions
5 with Metropolitan and Coachella?

6 DR. SMITH: Yes.

7 MR. ROSSMANN: Was the subject of the cap part of those
8 discussions?

9 DR. SMITH: Yes, it was.

10 MR. OSIAS: Could you inform us how the 3.1 million
11 acre-foot cap was determined?

12 DR. SMITH: Basically, the 3.1 million acre-foot cap is
13 the amount that, provided that IID's use does not exceed
14 that, we could provide Coachella its historic average use of
15 water.

16 MR. OSIAS: Historic average use?

17 DR. SMITH: Historic average use.

18 MR. OSIAS: Over what period of time?

19 DR. SMITH: It was a ten-year period of 1986 through
20 '97, and that period was selected because that is at the
21 time we established the IID offer to Coachella for
22 settlement.

23 MR. OSIAS: Thank you.

24 Turning to the question of the cost of conservation.
25 Tell us briefly what work you did in that regard.

1 DR. SMITH: What I did is I identified the various
2 methods of conservation that are available to conserve water
3 within Imperial Valley, and based on information and
4 collaboration with IID staff probably over many years now
5 have established estimates of the cost and yield of
6 conserved water, and used that information to prepare the
7 report which is attached as Appendix C of Exhibit 4.

8 MR. OSIAS: Tell us -- let me back up.

9 Give us, if you would, the conclusions with respect to
10 the costs that are in your report real briefly.

11 DR. SMITH: My conclusions are that the economic costs
12 of conservation include more than what is, I would call as
13 defined in my report, the direct costs, which are sort of
14 the easily measurable costs of conservation, which would be
15 your capital investment, operation, replacement cost and so
16 on and so forth. And it is important that the report be
17 understood within those limitations.

18 Anyway, within those limitations I looked at the
19 economic costs of available system projects to IID, which
20 include both the All American Canal, seepage recovery
21 projects and lateral interceptors. The All American Canal
22 is not a project available for the transfers contemplated to
23 San Diego and Coachella because of federal legislation that
24 is discussed in my report.

25 So by focusing on the other system projects that are

1 available, I briefly conclude that the valley's tapped out
2 at a hundred thousand acre-feet a year in terms of their
3 ability to conserve water. And if I recall, and I will try
4 to do this accurately, on Page 23 of Exhibit C, Appendix C
5 to Exhibit 4, is really a chart that says a thousand
6 calculations. What I have done here is shown and ranked the
7 direct per acre-feet annualized cost in 2001 dollars of
8 various projects and ranking the cheapest to the most
9 expensive that you can see is what's the cost of
10 conservation.

11 MR. OSIAS: This chart is limited to system
12 improvements; is that right?

13 DR. SMITH: Limited to system improvements and
14 moreover, as is discussed in my report, is incomplete
15 because there is other ancillary improvements that will have
16 to be made by IID to assure that they can capture the
17 conserved water that is estimated to be conserved in this
18 chart. So it is a lower bound.

19 MR. OSIAS: So a hundred thousand acre-feet max, at
20 least from your study, for system conservation that is
21 available?

22 DR. SMITH: Right.

23 MR. OSIAS: You also studied on-farm conservation
24 opportunities?

25 DR. SMITH: Yes.

1 MR. OSIAS: Could you tell us both what you did and
2 what you concluded?

3 DR. SMITH: First of all, I looked at the various
4 methods of on-farm conservation that are available in the
5 valley other than land fallowing.

6 MR. OSIAS: What are those methods?

7 DR. SMITH: There is virtually a long list of methods.
8 Some of them include tailwater recovery systems, both
9 permanent and portable, cascading tailwater.

10 MR. OSIAS: What is cascading tailwater?

11 DR. SMITH: What cascading tailwater is is suppose you
12 have two fields where one is above the other, because the
13 slope of the land, and the tailwater at the end of the
14 uphill field can cascade into the field below it. And if
15 the person operating below it has arrangements to receive
16 the water from the above field, they can use that as a
17 source of supply and reduce its orders from IID.

18 MR. OSIAS: Next?

19 DR. SMITH: Certainly drip irrigation. There is always
20 a concept of level laser, laser leveling. That is a
21 technology that is related to leveling that was discussed
22 yesterday.

23 MR. OSIAS: How does that save water?

24 DR. SMITH: The fundamental thing about water use in
25 the Imperial Valley, at least as I have learned it over the

1 years, is a trilogy. There is crop that matters, soil type
2 that matters and slope. The steeper the slope, given these
3 other factors, the higher the water use. The point of
4 leveling a field would be to reduce its slope, so that you
5 can reduce its water use. So the laser leveling is just a
6 method by which you would go ahead and level.

7 There is also different forms of furrowing, how the
8 farmer establishes furrows in his land as well as -- I think
9 I mentioned drip already. There is also, I guess, one other
10 method that is being discussed, actually two others that I
11 am aware of. Use of centering technologies, soil moisture,
12 salinity to decide how to better order water.

13 MR. OSIAS: Have you participated in any discussions
14 with farmer groups about the conservation opportunity for
15 the on-farm program?

16 DR. SMITH: Yes, I have.

17 MR. OSIAS: Over what period of time?

18 DR. SMITH: Commencing in 1997.

19 MR. OSIAS: Have these methods of conservation been
20 discussed?

21 DR. SMITH: These and probably very much more. In
22 fact, I would say that with the right economic incentives
23 and the right transaction my conclusion is based on
24 numerous conservations with growers out in the Imperial
25 Valley. There is more than a huge laundry list of potential

1 ideas of how best to conserve water on farm.

2 MR. OSIAS: Your report goes through the costs of
3 on-farm conservation; is that right?

4 DR. SMITH: That is true.

5 MR. OSIAS: Do you cost each of these different
6 alternatives?

7 DR. SMITH: No, I do not.

8 MR. OSIAS: Can you explain why not?

9 DR. SMITH: The reason is that the best information
10 that is available was on the tailwater recovery systems.

11 MR. OSIAS: Both types?

12 DR. SMITH: Primarily permanent, but also in the
13 negotiations with San Diego we established also trying to
14 translate the information to portable tailwater recovery
15 water systems. I have reviewed other information recently
16 on these other forms and, quite frankly, from a viewpoint,
17 maybe this is my academic background as a former professor,
18 the quality of information about cost and yield was not up
19 to snuff relative to the type of information we have on
20 tailwater recovery systems. Hence, the use of tailwater
21 recovery systems is, if you will, a benchmark technology to
22 discuss what are the costs.

23 MR. OSIAS: What is the relevance of the costs for the
24 on-farm program to develop conserved water?

25 DR. SMITH: You mean in terms of the on-farm program

1 contemplated under San Diego's deal?

2 MR. OSIAS: Yes.

3 DR. SMITH: The relevance of the cost will be that
4 ultimately, if this transaction proceeds through all of its
5 other hurdles required to get to the point of an on-farm
6 solicitation as was discussed yesterday, the District will
7 have to offer a contract which specifies the terms and
8 conditions, and farmers will have to make a decision, given
9 the terms of that contract, is it economic for them to
10 commit to reduce the use of water as will be required under
11 the proposed contracts.

12 And the idea is it was integral to have some benchmark
13 to establish what may be the cost of conservation if someone
14 wanted to participate on-farm.

15 MR. OSIAS: Have you participated in the analysis and
16 discussions regarding what the on-farm solicitation process
17 should be?

18 DR. SMITH: Yes, over the years.

19 MR. OSIAS: Can you tell us, because questions came up
20 yesterday, what steps have been taken to identify how that
21 program should be implemented?

22 DR. SMITH: Well, as Mr. Silva testified yesterday,
23 there has been working groups established by different
24 boards of directors, certainly the Water Conservation
25 Advisory Board, which for the nonvalley members and for the

1 room, it is a group of growers, was about 14 as appointed by
2 IID, to give them advice on water conservation. The Farm
3 Bureau certainly has presented ideas. And every time that I
4 am down in the valley if I run into a grower I know I get
5 three more.

6 MR. OSIAS: Have there been any determinations of the
7 structure for the on-farm program?

8 DR. SMITH: I would have to say based on discussions
9 that I have participated in I think there is a fundamental
10 point here that has to be understood, and that is that the
11 agreement will provide terms and conditions of a commitment
12 for a participant to reduce their water use. But the Board,
13 I think wisely, has not shown an interest in specifying
14 particular forms of conservation.

15 MR. OSIAS: Why do you say that is wise?

16 DR. SMITH: For two reasons. The first reason I'll
17 call the importance of diversity. Recall earlier, I
18 indicated there is a virtually laundry list which is much
19 longer than I have testified to of ideas of how to conserve
20 water in Imperial Valley. Each farmer has their own
21 circumstances, soil, slope, cropping patterns, size of
22 fields, skill sets, tolerance of risk, et cetera, et cetera,
23 et cetera.

24 So each of them have their own perceptions about the
25 relative attractiveness of what is on the list. Moreover,

1 there is people that probably have other ideas that should
2 be added to the list. So the important principal is to
3 allow the participants to decide what is the best methods
4 for them, what is the most economic method. If we were to
5 limit choice, we will, by that very limitation, make some
6 fields nonviable. So diversity is important.

7 The second thing is because of the long-term nature of
8 the agreements, flexibility is critical. The method of
9 conservation that is economic today undoubtedly will change
10 over time, especially over a 30-, 45-, 75-year term.
11 Economic conditions will change. Technology will evolve.
12 So, therefore, the methods that may be good for the first
13 five, eight, nine years of a transaction may no longer be
14 suitable. So, therefore, it is important to give
15 flexibility to the people who will be asked and will be
16 asked to commit to conserve water.

17 MR. OSIAS: Those are the two principal reasons that
18 the on-farm programs will not dictate a method of
19 conservation?

20 DR. SMITH: That has been my professional advice to my
21 clients, and it seems that that has been accepted to date.

22 MR. OSIAS: Is there a requirement that the
23 participants in the on-farm program demonstrate a savings in
24 water?

25 DR. SMITH: Yes. I think that is critical that I think

1 part of the fundamental transaction, or the bargaining, if
2 you will, will be in exchange for you getting paid under the
3 terms of the proposed solicitation, you must perform. We
4 are giving you flexibility. We are giving you diversity of
5 how to perform, but you must perform.

6 How do we think of performance? Reducing the use of
7 water.

8 MR. OSIAS: And the IID Board has adopted that
9 principle?

10 DR. SMITH: That's my understanding.

11 MR. OSIAS: And how will you determine or how will the
12 Board determine to measure reduced deliveries?

13 DR. SMITH: Ultimately you must establish a baseline
14 upon which you will measure conduct. And once the baseline
15 is established, which will be specified in the terms of the
16 solicitation, then it is a question of did you reduce your
17 use relative to the baseline.

18 MR. OSIAS: And that principle has been adopted by the
19 board?

20 DR. SMITH: That is my understanding.

21 MR. OSIAS: The on-farm program has not yet resulted in
22 a solicitation; is that correct?

23 DR. SMITH: That's correct.

24 MR. OSIAS: Can you explain why?

25 DR. SMITH: Because it is premature.

1 MR. OSIAS: Why is that?

2 DR. SMITH: If we go to the San Diego agreement or
3 Imperial/San Diego agreement, you will see there is an
4 outline of steps required. One of the first steps required
5 was getting transportation to get the at water to the
6 buyer. That was necessary for San Diego 'cause they weren't
7 interested in getting water they couldn't use. Until we
8 could assure that, this deal was sort of speculative.
9 Moreover, we needed State Board approval and completion of
10 environmental review. Until those steps are finalized, we
11 do not know the full terms and conditions and assignment of
12 risk and liabilities, some of which I think Mr. Gilbert
13 raised yesterday in this hearing, what they will be. And
14 until we can define those, how can we write an offer?

15 MR. OSIAS: When you say "write an offer," you mean
16 solicitation to farmers?

17 DR. SMITH: Right, right.

18 MR. OSIAS: So there is a schedule when that will take
19 place?

20 DR. SMITH: The schedule is transportation agreement,
21 check, so to speak.

22 MR. OSIAS: Check meaning that's been arranged?

23 DR. SMITH: We have paper to that effect.

24 Next step is we have initiated an environmental review
25 process which is in the middle. Comments aren't due until

1 soon, but, I mean, we are not finished.

2 We are up here today to initiate the State Board
3 process. And until we know the terms and conditions of
4 approval, if we do get approval, we need to factor that all
5 to how we design the program.

6 MR. OSIAS: Now, Mr. Silva testified that there were
7 other aspects of the on-farm program that are still being
8 discussed. When I say "other," I mean other than, there
9 will be a payment, it will be a required reduction against
10 some baseline?

11 DR. SMITH: Right.

12 MR. OSIAS: What do those discussions primarily involve?

13 DR. SMITH: It's -- in my view, it's almost diverse as
14 potential methods of conservation. There is a lot of issues
15 related to how broad based will the opportunity be.

16 MR. OSIAS: What does that mean?

17 DR. SMITH: Well, is it going to be a program that can
18 potentially work for a lot of acreage? Are we targeted to a
19 few large pieces, large fields?

20 MR. OSIAS: Anything else?

21 DR. SMITH: Other issues relate to elements of how much
22 flexibility. I mean, there is the principle of diversity of
23 flexibility, but there is the practical interpretation of
24 those principles, what does that mean. Other issues have to
25 do with method of payment, how a participant would be paid,

1 what would be the relation between the contract structures
2 and the payment structures they would be offered, duration
3 of commitment, et cetera, et cetera.

4 MR. OSIAS: Those are understudy in work right now?

5 DR. SMITH: Yes. And under active discussion not only
6 by IID and its advisers, but I know also from personal
7 experience by a lot of interested growers.

8 MR. OSIAS: In your opinion, will the participation
9 rules versus the principles of reduction in delivery be
10 finalized in time to do the solicitation?

11 DR. SMITH: That is my understanding of the plans of
12 the District.

13 MR. OSIAS: You believe they will succeed?

14 DR. SMITH: Yes.

15 MR. OSIAS: Why is broad-based participation relevant?

16 DR. SMITH: It is important and it is related in part
17 to my discussion of my study, which is, what, Appendix C to
18 Exhibit 4, where I indicate that using the benchmark
19 technology of tailwater recovery systems, unless we can
20 extend participation down to field size as small as 80
21 acres, we will be unable, IID will be unable to conserve the
22 volumes of water that are contemplated under the proposed
23 agreements.

24 MR. OSIAS: Let me have you put that in a positive as
25 it relates to a question that was asked yesterday.

1 If you can get participation in field sizes down to the
2 80-acre field size, can 200,000 acre-feet of on-farm water
3 be conserved?

4 DR. SMITH: Absolutely, based on the information that
5 is contained in my report.

6 MR. OSIAS: And that information in quick summary is?

7 DR. SMITH: Based on the many years of experience the
8 District had had with its 1988 agreement with Metropolitan
9 Water District of Southern California, with the funding of
10 tailwater recovery systems. My report includes, provides, a
11 lot of information about costs and yields of these systems.

12 MR. OSIAS: Are there any other reasons then that
13 broad-based participation is a goal?

14 DR. SMITH: In addition to its economic imperatives, so
15 to speak, there is also, quite frankly, an issue of
16 political equity in the valley.

17 MR. OSIAS: Is there any connection with the cap that
18 now IID will have and the broad-based participation?

19 DR. SMITH: Yes. I think that is another consideration
20 because if IID is to live under its cap, there will be times
21 of potential obligations for the District to reduce its use
22 of water to pay back overages of the cap. And if we can
23 have a program which is broad-based, where people opt in
24 voluntarily because of the economic incentives provided by
25 the agreements to live under the cap, that is going to be

1 much more viable long term in the valley than if we only had
2 a few people in the deal and everyone else was living under
3 the cap as well as them.

4 MR. OSIAS: Based on your report, a hundred thousand
5 acre-feet of system conservation is economically available?

6 DR. SMITH: Correct.

7 MR. OSIAS: 200,000 acre-feet of on-farm is
8 economically available, at least using tailwater return
9 systems as the economic benchmark?

10 DR. SMITH: Correct.

11 MR. OSIAS: Has the District determined the sequence of
12 conserving water as between those two sources?

13 DR. SMITH: I think the District is moving towards
14 sequencing, and this is actually related to a question that
15 Mr. Silva answered to Mr. Du Bois yesterday, moving towards
16 sequencing system ahead of on-farm.

17 MR. OSIAS: Do you know why?

18 DR. SMITH: I know of two reasons why.

19 MR. OSIAS: Would you tell us?

20 DR. SMITH: Yes. First of which, as a practical
21 matter, the valley needs system improvements to assure that
22 they can capture the on-farm conservation.

23 MR. OSIAS: What does that mean?

24 DR. SMITH: What it means is if people were to start
25 conserving water on-farm, the operation of the systems need

1 to be changed and adapted, including some of the system
2 projects that are outlined, to be sure that the water is
3 indeed not only captured theoretically but is also being
4 able to be used within the IID system so that they can
5 reduce their use of Colorado River water at Imperial Dam.

6 MR. OSIAS: You said there were reasons. What is the
7 other reason?

8 DR. SMITH: The second reason is, quite frankly,
9 economic.

10 MR. OSIAS: Would you explain?

11 DR. SMITH: If we go back to the chart of where I
12 indicated that there is a sequence from an economics point
13 of view, cheaper increasingly more expensive system
14 projects, by sequencing them first, doing your cheaper
15 options first.

16 MR. OSIAS: That was on Page 23 of Exhibit C?

17 DR. SMITH: Yes, thank you, Mr. Osias.

18 That by going cheaper first we can enhance our cash
19 flow in the early years.

20 MR. OSIAS: And the benefit of that?

21 DR. SMITH: The benefit of that is that it increases
22 our financial capacities.

23 MR. OSIAS: Have you had any activity on behalf of the
24 District with respect to the financing of either system or
25 on-farm conservation?

1 DR. SMITH: Yes.

2 MR. OSIAS: You heard some of the questions yesterday,
3 I think from Mr. Gilbert and Mr. Du Bois on that subject?

4 DR. SMITH: Uh-huh.

5 MR. OSIAS: You can't say uh-huh.

6 DR. SMITH: Yes.

7 MR. OSIAS: Thank you.

8 I guess you can say it, but no one will know what it
9 means in the record.

10 DR. SMITH: So?

11 MR. OSIAS: Is there up-front money being paid by San
12 Diego?

13 DR. SMITH: No.

14 MR. OSIAS: Is up front money being paid by Coachella?

15 DR. SMITH: No.

16 MR. OSIAS: The term "up-front money" as used in the
17 Imperial community means advanced payment; is that how you
18 are using that phrase?

19 DR. SMITH: Well, it could mean advanced payment in the
20 sense that it could be an advance of the commencement of a
21 contractual obligation, or it could be simultaneous with the
22 commencement of the contractual obligation.

23 The basic idea is pay us a bundle here and also pay us
24 as we perform as opposed --

25 MR. OSIAS: Some lump sum concept?

1 DR. SMITH: Right.

2 MR. OSIAS: That is not in the current arrangements in
3 these agreements, correct?

4 DR. SMITH: That is correct.

5 MR. OSIAS: What is the arrangement in these agreements
6 for payment?

7 DR. SMITH: It is basically pay as you perform. And,
8 for example, in the San Diego agreement there is annual --
9 make the annual water quantities that Imperial would make
10 available at Imperial Dam and there is a specified tedious
11 quarterly payment mechanism in the agreement of which San
12 Diego will pay us quarterly.

13 MR. OSIAS: Tedious because they do it four times a
14 year?

15 DR. SMITH: Yeah. It is tedious in the projections and
16 settling up. I was involved in the drafting of it, so I
17 remember how tedious it was.

18 MR. OSIAS: In your opinion, does the revenue streams
19 under the contract enable the District to develop
20 conservation without going into debt or maybe put out
21 negatively amortizing the cost of improvements?

22 DR. SMITH: Well, what kind of debt did you have in
23 mind?

24 MR. OSIAS: Debt that wouldn't be covered by the
25 revenue stream.

1 DR. SMITH: The revenue stream, in my opinion, is more
2 than sufficient to cover all types of financial
3 transactions, including debt transaction which may or may
4 not be secured by anything other than contracts themselves.

5 MR. OSIAS: Maybe I should ask the question that way.

6 Is it possible to borrow funds to pay for any cost that
7 comes earlier than revenues and collateralize it only with
8 the revenue stream?

9 DR. SMITH: That is possible.

10 MR. OSIAS: What does it depend on for the District to
11 do that?

12 DR. SMITH: It depends on, among other things, us
13 having a clear assessment of, among other things, after the
14 completion of environmental review, what is the magnitude of
15 those cost obligations, whether or not we have the surprise?

16 MR. OSIAS: There has been a no-surprise issue?

17 DR. SMITH: The no-surprise concerns and other things
18 which, from a financial point of view, would be related to
19 what is the risk of early termination.

20 MR. OSIAS: When will those be known, roughly?

21 DR. SMITH: After the completion of environmental
22 review, securing of the terms and conditions of the permits,
23 and terms of conditions of regulatory approval.

24 MR. OSIAS: This fall, perhaps?

25 DR. SMITH: I am not as involved in the day to day part

1 of this transaction, so I have some basis to predict timing.

2 MR. OSIAS: Have you had any discussions with
3 potentially interested financing parties?

4 DR. SMITH: Yes, I have, on behalf of the District.

5 MR. OSIAS: And have they expressed any interest in
6 waiting till the conclusion of environmental review?

7 DR. SMITH: Yes. For example, right after the signing
8 of the agreement with San Diego in '98, I met with Imperial
9 Valley Bank, Bank of America, Wells Fargo, Farm Credit
10 Services and another major farm group out of the Midwest
11 whose name I forget, I apologize. And basically their
12 response was looks attractive. Until you pin down the
13 things I've recited, environmental review, potentially
14 liability, whether or not you get your no-surprise
15 protection, et cetera, et cetera, so that you can come back,
16 Dr. Smith, with the cash flows and the final discussion and
17 presentation of risk of early termination, that is when it
18 will be ripe to have those discussions. When those
19 discussions, if and when they occur, they'll probably be
20 able to turn around their decision in 30 to 60 days.

21 MR. OSIAS: Assuming adequate environmental mitigation,
22 no-surprises assurance and funding for that mitigation, do
23 you believe revenue-based financing will be available?

24 DR. SMITH: I believe it is -- certainly, based on my
25 preliminary discussions, I believe it will be.

1 MR. OSIAS: Are there any other tools that the District
2 has available to obtain funding should expenses be incurred
3 before water revenues are generated?

4 DR. SMITH: Yes.

5 MR. OSIAS: What are they?

6 DR. SMITH: Well, I mean, while this is unknown to the
7 water field, because, quite frankly, we haven't had a real
8 commercial transaction in the water field yet, is that if we
9 look at other commercial situations, there is the
10 opportunity, for example, to use, possibly sell, the
11 shortage premium stream that is called for in the San Diego
12 agreement.

13 MR. OSIAS: Define what the shortage premium is.

14 DR. SMITH: Under the pricing mechanism under the San
15 Diego agreement, we have what is defined as a base contract
16 price, which is a formula which relates a base contract
17 price to Met's rates and charges less defined conveyance
18 costs subject to discounts schedule. It is in Article V of
19 the agreement. In addition, at times of defined shortages
20 there are premium payments that will be made and there are
21 three triggers under the agreement under which shortage
22 payments will be made.

23 MR. OSIAS: You don't need to tell us the triggers.
24 Your concept then is, perhaps, those shortage payments can
25 be --

1 DR. SMITH: In the financial community is called strip
2 those off.

3 MR. OSIAS: And pay something for them up front?

4 DR. SMITH: Right. And you could also have swaps of
5 revenue streams. In the sense that apart from the shortage
6 premium we have a payment stream from these contracts,
7 especially the San Diego, and there may be the opposite. It
8 is much like this chart here, if you will, they think of
9 payment streams here, and you can swap a revenue stream
10 where you get something that is more stable.

11 MR. OSIAS: Finally, you did a report on the benefits
12 to IID and the state and other parties to the QSA; is that
13 right?

14 DR. SMITH: Yes. That is Attachment D to Exhibit 4.

15 MR. OSIAS: With respect to both your testimony and all
16 these reports, you signed them under penalty of perjury?

17 DR. SMITH: Yes.

18 MR. OSIAS: They are your testimony in that regard and
19 offered into evidence; is that correct?

20 DR. SMITH: That is correct. There is one minor change
21 I would like to make in Exhibit D or attachment -- this is
22 too convoluted.

23 MR. OSIAS: Is it Exhibit D?

24 DR. SMITH: Exhibit D to our attachment.

25 MR. OSIAS: Exhibit D to IID Exhibit 4.

1 DR. SMITH: Page 4, the footnote is scrambled. Rather
2 than spending time here today unscrambling that, I ask
3 permission to just submit a red line.

4 MR. OSIAS: Which footnote?

5 DR. SMITH: Footnote 4 and also the number that is
6 before footnote four is slightly incorrect, it has no change
7 on my conclusions.

8 MR. OSIAS: Thank you.

9 Thank you, Mr. Chairman.

10 CHAIRMAN BAGGETT: Thank you.

11 San Diego, Mr. Slater, do you have any questions?

12 MR. SLATER: Yes, I do.

13 ----oOo----

14 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

15 BY SAN DIEGO COUNTY WATER AUTHORITY

16 BY MR. SLATER

17 MR. SLATER: My questions are for Mr. Smith alone.

18 Mr. Smith, I would like to probe a little bit on your
19 background that you applied prior to issuing the opinion
20 that you provided to IID in this case.

21 Have you heard of a publication called The Water
22 Strategist?

23 DR. SMITH: Yes. I founded that publication with my
24 wife in 1986, and started out initially as a quarterly. It
25 is paid circulation. It is now on the web at

1 waterstrategist.com, which is now monthly, where we track
2 water transactions throughout the Western United States and
3 in addition significant policy developments, legal,
4 political developments that have any impact in our judgment
5 on the value for trends in the market of water.

6 MR. SLATER: You are familiar with the articles and
7 contents of The Water Strategist?

8 DR. SMITH: Yes.

9 MR. SLATER: It is your testimony that the articles in
10 The Water Strategist analyze water transactions; is that
11 correct?

12 DR. SMITH: That's correct.

13 MR. SLATER: Do they do water transfers?

14 DR. SMITH: Yes, they do.

15 MR. SLATER: Do they water transfer by lease and by
16 sale?

17 DR. SMITH: Correct, even by exchange.

18 MR. SLATER: And is it true that you -- Strike that.

19 Are you aware or do you have knowledge of a firm called
20 Stratacon?

21 DR. SMITH: Yes. I am senior vice president of
22 Stratacon.

23 MR. SLATER: Does the business of Stratacon consult
24 with and provide advice on water transactions?

25 DR. SMITH: Yes.

1 MR. SLATER: Do these transactions include water
2 transfers?

3 DR. SMITH: Water transfers, development of storage
4 facilities, acquisition of assets.

5 MR. SLATER: So is it safe to say that independent of
6 your work for IID that you have analyzed dozens, if not
7 hundreds or more, water transfers and transactions?

8 DR. SMITH: Correct.

9 MR. SLATER: Is this experience in combination to the
10 work that you directly provide by IID that you referred to
11 in your testimony as background that allowed you to issue
12 the opinions in this case?

13 DR. SMITH: It is experience from those publications as
14 well as the books I have written which are in my resume.

15 MR. SLATER: Thank you.

16 On direct you testified about the revenue streams
17 associated with the San Diego contract?

18 DR. SMITH: Yes.

19 MR. SLATER: You mentioned a base price and a liability
20 premium, correct?

21 DR. SMITH: Shortage premium.

22 MR. SLATER: With regard to the base price, do you have
23 an opinion as to what the present base price would be under
24 that contract if it began today?

25 DR. SMITH: You know, I have not done the calculations

1 in the last year, so I can't offer that opinion.

2 MR. SLATER: The last time you provided a calculation,
3 can you tell us what your understanding was?

4 DR. SMITH: Well, the last time I looked at that
5 calculation is when we developed Exhibit A to the agreement,
6 and I think that was approximately \$250 an acre-foot.

7 MR. SLATER: Under the base contract price of the
8 contracts, what happens to the initial start price over
9 time?

10 DR. SMITH: It will change -- the base contract price
11 will change according to basically three factors. First of
12 which is the base contract price includes in it a discount
13 which starts at that time 25 percent the first year and
14 declines under a negotiated schedule over time to 5 percent
15 by year '17, if memory serves. So that will be one way in
16 which the base contract changes over time.

17 Second, we have in that base contract price a
18 definition of a full Met rate which is reflecting rates and
19 charges related to the Met provision of uninterrupted,
20 untreated water service. And the intent is regardless of
21 how Met financially organizes itself, subtract those
22 relevant rates and changes, and as those change over time,
23 that will change the base contract price.

24 And the third portion of the formula relates to the
25 conveyance cost. That is San Diego pays for getting the

1 water from Imperial Dam to a defined point in San Diego
2 County. And to the extent that that changes over time, that
3 will also have a impact on the base contract price.

4 MR. SLATER: Based upon the declining discounts that
5 you referenced, is it your opinion that the price that San
6 Diego pays in the contract is likely to go up or down in the
7 first ten years?

8 DR. SMITH: Based on the declining discounts, it is
9 going up.

10 MR. SLATER: Do you have any projection as to what the
11 cost is likely to be over the first ten years?

12 DR. SMITH: I will have to rely on recollection. I
13 remember publishing this in Water Strategist right after the
14 announcement. I think the answer may be on the order of 280
15 to \$290 an acre-foot. But that is based on recollection.

16 MR. SLATER: Your approximation would be that the
17 initial start price is 250 and increasing to 280, correct?

18 DR. SMITH: Yes. Based on my recollection.

19 MR. SLATER: Have you provided or prepared an analysis
20 on the value of the reliability premium?

21 DR. SMITH: Yes.

22 MR. SLATER: Can you tell me what that is?

23 DR. SMITH: You mean the shortage premium?

24 MR. SLATER: Yes, sorry, the shortage premium.

25 DR. SMITH: I'm just trying to --

1 MR. SLATER: Present value.

2 DR. SMITH: The present value. Yes, I have done that
3 and certainly have shared that in closed session with IID.

4 MR. SLATER: Would you mind telling us what that number
5 is?

6 MR. OSIAS: I object unless it has been discussed
7 outside of closed session on the ground of attorney-client
8 privilege. If we can have a foundational question to see if
9 he told anyone other than counsel.

10 CHAIRMAN BAGGETT: Sustained.

11 MR. SLATER: Have you prepared an analysis of the
12 reliability premium in the context of your work for The
13 Water Strategist?

14 DR. SMITH: No, I have not.

15 MR. SLATER: Have you prepared a analysis of the
16 reliability premium in your work as a consultant for
17 Stratacon other than for IID?

18 DR. SMITH: No, I have not.

19 MR. SLATER: Have you written any reports or published
20 any materials on the value of the shortage premium?

21 DR. SMITH: Value of the shortage premium, no, not to
22 my recollection.

23 MR. SLATER: Have you -- the shortage premium, can you
24 describe the conditions under which the shortage premium is
25 triggered?

1 DR. SMITH: Yes, I can.

2 MR. SLATER: Can you tell us what those are?

3 DR. SMITH: Sure. There are actually three triggers,
4 if you will. One trigger would be, and if I misstate the
5 contract I apologize. If in Northern California it is
6 determined to be a critically dry year, that is one
7 trigger. If that is true, the contract price is the base
8 contract price plus 10 percent.

9 Another trigger is if in any year there is less than
10 7.5 million acre-feet available in the Lower Colorado River
11 Basin according to a declaration, I think, by the Secretary
12 of the Interior, the contract price is the base contract
13 price plus 25 percent. If both those things occur
14 simultaneously, the contract price is the base contract
15 price plus 35 percent.

16 And there is one final trigger. Independent of those
17 other two conditions, if the San Diego County Water
18 Authority were to incur a shortage, and I apologize, Mr.
19 Slater, it's been a while since I reviewed the contract
20 language here, that I think related to some form of
21 administrative action here. We'd have to look up the exact.
22 There is a table in the agreement which relates the
23 magnitude of the shortage premium to the magnitude of the
24 contract, and as I recollect that schedule, the shortage
25 premium would be at 5 percent for a relatively small

1 shortfall and up to 50 percent if the shortfall reached as
2 high as 30 percent or more, which, based on our
3 recollection, happened to be the shortfall San Diego
4 experienced in 1991. That is my recollection of the
5 shortage premium.

6 MR. SLATER: The frequency of the Colorado River
7 shortage in the past has been?

8 DR. SMITH: The Secretary of the Interior has never
9 declared a shortage in the lower basin.

10 MR. SLATER: Do you have an opinion as to whether the
11 frequency -- do you have an opinion as to frequency at which
12 a shortage might be declared on the Colorado River in the
13 future?

14 DR. SMITH: I have no personal opinion on that. Excuse
15 me, I have not conducted an analysis to estimate that
16 frequency.

17 MR. SLATER: Have you conducted an analysis to
18 determine how likely or frequent a shortage would exist
19 under the contract with regard to the State Water Project?

20 DR. SMITH: Certainly I have examined the historic
21 frequency of critically dry critical years, below normal,
22 abnormal wet years. And if my recollection is correct, I
23 think we even shared this with San Diego County Water
24 Authority negotiators at the time of negotiation of the
25 agreement. And that was obtained actually from the

1 Department of Water Resources information.

2 MR. SLATER: And your analysis of the frequency was?

3 DR. SMITH: Based on my recollection, Mr. Slater, and I
4 just hadn't prepared myself for this line of questioning, I
5 am going to have to -- but that is look up of the data. But
6 it should be on the order of, what, 11 percent of the time
7 or maybe it is 13.

8 MR. SLATER: Thank you.

9 I have no further questions.

10 CHAIRMAN BAGGETT: Thank you.

11 Colorado Tribes?

12 MR. SHEPARD: No, we have none.

13 CHAIRMAN BAGGETT: Defenders of Wildlife.

14 Sierra Club is still not here.

15 County of Imperial.

16 MR. ROSSMANN: Yes, sir, I have just a few.

17 ---oOo---

18 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

19 BY COUNTY OF IMPERIAL

20 BY MR. ROSSMANN

21 MR. ROSSMANN: Dr. Merchant, I guess you get let off.

22 All my questions are also for Dr. Smith.

23 Sir, let me just make it easier for you ask you to
24 refer to IID Exhibit 22, which is the QSA. I can lend you
25 my copy.

1 DR. SMITH: I would appreciate it.

2 MR. ROSSMANN: That would leave me without one. I
3 think there is one in those binders there.

4 DR. SMITH: Got it.

5 MR. ROSSMANN: Please turn to Page 11.

6 CHAIRMAN BAGGETT: What exhibit?

7 MR. ROSSMANN: That is Exhibit 22, Imperial 22, Page
8 11. I am also going to ask Dr. Smith if he'd refer to Pages
9 8 and 9 of his Exhibit D to Exhibit 4, I believe it is.

10 DR. SMITH: Okay.

11 MR. ROSSMANN: This is where you talk about the
12 benefits to Coachella of the QSA or the benefits for the
13 quantification. I am reading from the final carryover
14 paragraph:

15 The proposed quantification of IID's and
16 CVWD's water rights will also provide
17 significant benefits. (Reading.)

18 DR. SMITH: Got it.

19 MR. ROSSMANN: And you say that for CVWD the benefit
20 will be to have a quantified priority three right of 330,000
21 acre-feet.

22 Is that the --

23 DR. SMITH: If you want to complete the sentence --

24 MR. ROSSMANN: Yes, sir.

25 DR. SMITH: Rather than an unquantified right, the

1 amount of water remaining under the 3.85
2 million acre-foot agricultural entitlement
3 after the uses by priority one, priority two
4 and IID. (Reading.)

5 MR. ROSSMANN: Thank you, sir.

6 Is that provision, Paragraph 2.2(1) on Page 11 of the
7 QSA?

8 DR. SMITH: Actually, as I think I have already
9 testified, the firming up, if you will, if I may
10 colloquialize what I wrote --

11 MR. ROSSMANN: Yes.

12 DR. SMITH: -- is related to IID's quantification at
13 3.1, and the quantification of IID at 3.1 is a consequence
14 provides Coachella with 330-.

15 MR. ROSSMANN: Yes, sir.

16 DR. SMITH: Not trying to be difficult, but you can
17 either find it there and/or a consequence of our 3.1. They
18 are tied together.

19 MR. ROSSMANN: That is the point, and I appreciate
20 you're confirming for us.

21 As I understood your testimony, those numbers were
22 negotiated between the parties based on protecting
23 Coachella's previous ten years of use?

24 DR. SMITH: That is not true.

25 MR. ROSSMANN: Would you please explain how the number

1 330,000 acre-feet and 3.1 relate?

2 DR. SMITH: Okay. Allow me to elaborate actually on my
3 direct, then.

4 MR. ROSSMANN: Yes, sir. That is the purpose of this
5 examination.

6 DR. SMITH: Let's start with 3.85 million acre-feet.
7 That is the agricultural entitlement. We have priority one
8 and two. They're senior. IID's always respected seniority.
9 We know they are ahead of us. Based on the ten-year period
10 that was available as of the date 1997, when this proposal
11 was developed, the average annual use of priority one and
12 two, that is diversions less measured return flows, less
13 unmeasured return flows, was 420,000 acre-feet. Sort of
14 rounding. Okay.

15 For that same period the average annual use of
16 Coachella Valley Water District was 330-. Add those two
17 numbers together, subtract from 385-, we have 3.1. We
18 rounded a few things because we weren't going to come in
19 with our proposal to be 3.089932. So there is some
20 rounding. That is the method.

21 And that was done in preparation for an offer of
22 settlement which the IID Board authorized and made public in
23 1997, if I recall correctly, maybe early '97, which predates
24 the negotiations in the QSA.

25 MR. ROSSMANN: I understand.

1 DR. SMITH: IID has always taken the position when
2 those negotiations started we're at 3.1, we're at 3.1, we're
3 at 3.1. So, yes, I guess it was negotiated in the QSA, but
4 the parties that were negotiating as part of the QSA, we
5 moved on to other issues.

6 MR. ROSSMANN: Am I being too simplistic in concluding
7 that the numbers in the QSA of 3.1 for Imperial's budget and
8 330,000 for Coachella's budget in the provision on Page 11?

9 DR. SMITH: No, that is fine.

10 MR. ROSSMANN: Essentially ratify the existing uses of
11 both of those entities up to that time or in the recent past?

12 DR. SMITH: No. What it did is it said that if you
13 were to -- by the way, if you were to look at the historic,
14 the recent historic use of priority one and two, that is
15 420-, if we were to have a proposal which we advanced, which
16 were to offer a junior a very generous historic use of their
17 water, that is what is left, 3.1.

18 MR. ROSSMANN: So perhaps I have missed the point.
19 Because Imperial may actually have used more than 3.1?

20 DR. SMITH: And less.

21 MR. ROSSMANN: As our table shows, right.

22 DR. SMITH: More and less.

23 MR. ROSSMANN: Let the record show you are pointing to
24 the table that identifies IID's use of Colorado River water.

25 DR. SMITH: It's actually a chart.

1 MR. ROSSMANN: Yes, sir. Sorry, I didn't have a Phi
2 Beta Kappa.

3 In your testimony on benefits to Coachella you did not
4 mention the hundred thousand acre-feet made available to
5 them by the Imperial Irrigation District in the QSA, at
6 least in that paragraph?

7 DR. SMITH: Well, it was an oversight.

8 MR. ROSSMANN: That is a benefit also to Coachella?

9 DR. SMITH: Absolutely, they have a benefit of a
10 transaction.

11 MR. ROSSMANN: As an economist, do you have a view of
12 the relative importance of those two benefits? The
13 quantification and, if you will, the assurance of 330,000
14 versus the extra 100,000?

15 DR. SMITH: Again, that is an analysis that I have
16 shared in closed session with IID Board over the years.

17 MR. ROSSMANN: And you have not shared that in the
18 public arena or outside the board?

19 DR. SMITH: No. I mumbled no, no.

20 MR. ROSSMANN: Your counsel is happy to hear it
21 louder.

22 Let me turn away from those pages for a moment. Let me
23 turn to the next page of your testimony, Page 9.

24 When you talk about the benefits of -- the consequences
25 of failure. And you use an estimate of replacement cost of

1 \$350 an acre-foot within Metropolitan; is that correct?

2 DR. SMITH: Right.

3 MR. ROSSMANN: I am reading in the middle of the
4 Footnote 20. Could that be characterized as a conservative
5 number?

6 DR. SMITH: Right now, given the absence of the
7 developed market in the state of California for water, water
8 valuations is modern art. I am sure that some people say
9 that is conservative. I am sure there is other people will
10 say that's high. What I base it on is what I cited in my
11 report was the proposed Metropolitan KD's
12 transaction.

13 MR. ROSSMANN: Right.

14 DR. SMITH: That was the foundation of it.

15 MR. ROSSMANN: That is a transaction that has not yet
16 been consummated?

17 DR. SMITH: As proposed, it is my understanding they
18 actually have completed environmental review.

19 MR. ROSSMANN: If the replacement water were to come
20 from the State Water Project. What is the per acre-foot
21 cost of that to Metropolitan, if you know?

22 DR. SMITH: Depends on the hydrologic year.

23 MR. ROSSMANN: Let's do what they like to do, let's use
24 the normal year.

25 DR. SMITH: I can't recollect the exact number there.

1 MR. ROSSMANN: Would it be more than \$350 an acre-foot?

2 DR. SMITH: No, I don't think it would be in a normal
3 year.

4 MR. ROSSMANN: Are you familiar within the course of
5 your publications and practice, water transfers that emanate
6 from Kern County?

7 DR. SMITH: Yes. I think we reported them all.

8 MR. ROSSMANN: Those are in the thousand dollar
9 acre-foot range, were they not?

10 DR. SMITH: Yeah. But you have to be very careful
11 because those transactions are actually a one-time payment
12 of a thousand dollars per acre-foot of entitlement, and the
13 buyer assumes the ongoing financial obligations of the
14 contract.

15 The proper valuation of the cost of the water would
16 amortize that up front payment. That is an example of an
17 up-front payment. To talk about something that would be
18 equivalent to an annualized cost to water. Plus they have
19 to bring in the fact that the State Project contractual
20 entitlements, firm yield is not one. I mean, so there is a
21 lot of nuances to evaluation there.

22 MR. ROSSMANN: Yes, sir.

23 Did you do a calculation not just of the replacement
24 cost, but also of the potential of that replacement water to
25 reduce economic benefits in the receiving county?

1 DR. SMITH: No, I did not.

2 MR. ROSSMANN: Do you know if anyone on Imperial staff
3 did such a calculation?

4 DR. SMITH: Not to my knowledge.

5 MR. ROSSMANN: The value to generate income in the
6 receiving water would be far greater than the replacement
7 cost of the water, would it not?

8 DR. SMITH: Yes.

9 MR. ROSSMANN: Finally, sir, let me ask you to refer to
10 Exhibit D to your Exhibit 4.

11 DR. SMITH: Isn't that the one we were on?

12 MR. ROSSMANN: I thought we were on C.

13 DR. SMITH: No, we're not.

14 MR. ROSSMANN: You're right, I guess it would be C that
15 I would like you to look at.

16 DR. SMITH: Got it.

17 MR. ROSSMANN: And in your final paragraph your
18 conclusion sounds pretty apocalyptic as to the consequences
19 of a mismanaged transfer in the Imperial Valley.

20 Do you wish to elaborate on that a little bit more
21 about the --

22 DR. SMITH: First, I would like to express my
23 puzzlement of characterizing it as a mismanaged transfer.
24 What I was talking about was really a hypothetical. Suppose
25 some regulatory agency imposes an obligation to conserve

1 water without compensation, if that is what you mean by -- I
2 am sorry, your word was, what, mismanaged transfer?

3 MR. ROSSMANN: Yes, sir.

4 DR. SMITH: Compelled transfer. If that's what you
5 mean by mismanaged, I am with you.

6 MR. ROSSMANN: Let's put it this way, failure to
7 acknowledge economic impacts of the transfer in the area of
8 origin.

9 DR. SMITH: Right.

10 MR. ROSSMANN: Are you familiar with the history, and I
11 don't mean the economic nuances and details, the general
12 history of the Owens Valley?

13 DR. SMITH: Yes.

14 MR. ROSSMANN: Have you read a book by William Karl
15 entitled Water and Power?

16 DR. SMITH: Absolutely.

17 MR. ROSSMANN: Would you say, based on your experience,
18 that this transfer, if these economic costs are not
19 compensated, has the potential in the Imperial Valley to
20 parallel the experience in the Owens Valley in the 1920s?

21 DR. SMITH: Well, first of all, let me clarify. We can
22 put away this exhibit because that is not -- maybe I'm just
23 missing your question.

24 Are you talking about the transfer or the hypothetical
25 of this example?

1 MR. ROSSMANN: Yes, sir.

2 DR. SMITH: Yes, certainly, it would have impacts that
3 would be -- I just want to be clear we are not talking about
4 the proposed transfer?

5 MR. ROSSMANN: No, sir.

6 Thank you very much. That is all the questions I
7 have.

8 CHAIRMAN BAGGETT: Farm Bureau, California Farm Bureau.

9 MR. RODEGERDTS: No.

10 CHAIRMAN BAGGETT: Mr. Du Bois.

11 ---oOo---

12 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

13 BY MR. DU BOIS

14 MR. DU BOIS: I think I came up here mainly because I
15 don't want Rodney Smith to think I am not interested in the
16 price that Imperial gets for its water. But I have to admit
17 that I absolutely don't understand and have no knowledge of
18 how I can predict what price I am going to receive and
19 consequently how much money I can afford to invest in
20 conservation.

21 Can you enlighten me on that?

22 DR. SMITH: First of all, I can fully understand why
23 you're in the position you're in today. When the District
24 proceeds towards the development and solicitation process,
25 it will be incumbent upon the District to be able to develop

1 the materials in addition to the legal contract and the
2 forms so that you will be able to say something differently.
3 Otherwise, quite frankly, we can't expect you to
4 participate. So I appreciate your current situation and,
5 quite frankly, that will have to change for the solicitation
6 process to be successful.

7 MR. DU BOIS: It seems to me that after that is
8 presented to me it's too late to then protest to this Board
9 my feelings that it would be unwise for this Board to
10 approve this transfer. Because after it is approved, my own
11 District is subject to whatever penalties there would be for
12 not performing, and then I would pay the penalty.

13 CHAIRMAN BAGGETT: Is this a question?

14 MR. DU BOIS: The question is --

15 MR. OSIAS: Is this a question?

16 CHAIRMAN BAGGETT: I assume that was an objection.

17 MR. DU BOIS: What justification can you give me with
18 your better insight on prices that I should be confident
19 that we are headed in the right direction?

20 DR. SMITH: Mr. Du Bois, I think you asked me two
21 questions, if I may.

22 MR. DU BOIS: You can split them.

23 DR. SMITH: Thank you, sir.

24 I think your first question was what would -- allow me
25 to restate in my own words to see if I got it.

1 MR. DU BOIS: Thank you.

2 DR. SMITH: Suppose the District were to develop --
3 suppose we got through environmental, all those hurdles,
4 went to the solicitation process, got a Kracker Jack
5 contract. I got all the greatest materials in the world and
6 I imagine, this would be the truth, you and I will be
7 sitting down somewhere as we have done many times before,
8 you come in with your five pages of great questions as you
9 always have in the past, and you look in the eye and you
10 say, "You know what, I appreciate it. I just don't want to
11 do it."

12 And you know what I would say in that circumstance, "I
13 understand fully, Bill, why you don't want to do it. Don't
14 do it. This is voluntary."

15 In that setting then you said, "What happens if enough
16 people come to that same conclusion?" Okay. That is
17 related to whether or not we can meet the minimum of
18 130,000. If enough of you are there, just speaking
19 hypothetically, I hope this is hypothetical. I hope many
20 months from now we can laugh about this testimony. But if,
21 indeed, we fail to meet the 130-, the question is going to
22 be then, certainly of the people who've tendered in, so to
23 speak, they're comfortable you're not. Okay. Then the
24 point is IID, as I have testified, has the capabilities of
25 up to a hundred thousand acre-feet of water in the system

1 and whatever the number of tenderers are, and will think
2 that they are the dumbest people in the world because they
3 tendered into something they shouldn't have, that is fair.
4 The issue then is going to be amongst the parties is that I
5 am not aware of any agreement right now that, you know, that
6 deals with those quantities of water.

7 Therefore, I think the next implication of your
8 question is then what are the obligations of IID.

9 You mean under the San Diego agreement? I am just
10 wanting to focus in. If you mean that --

11 MR. DU BOIS: Yes.

12 MR. OSIAS: Maybe we can have him restate his question
13 because we have the witness sort of making up questions, not
14 really what the gentleman was asking.

15 CHAIRMAN BAGGETT: Could you restate it now, Mr. Du
16 Bois?

17 MR. DU BOIS: I am not sure I remember it. But I
18 wanted you to inform me of your opinion of what happens if
19 the farmers do not sign up with sufficient water to qualify
20 under the agreement with San Diego.

21 DR. SMITH: Well, that would be a failure of a
22 condition of the agreement and the agreement under its
23 negotiated terms cannot go forward. IID has no obligation
24 of a kill fee of San Diego or exit fee or any reimbursement
25 that you've seen in commercial transactions, a breakup fee

1 or whatever. So the question would be what do the parties
2 do then.

3 They may decide that -- the board may decide with the
4 quantities that are voluntary, under your assumption, under
5 your question, voluntarily willing to go with the program
6 plus system capabilities, sit down with San Diego and
7 Coachella and whatever, maybe that is the deal. I don't
8 know. You just asked me to speculate now, to be honest.
9 That is all I am really prepared to do today.

10 MR. DU BOIS: Thank you.

11 No further questions.

12 CHAIRMAN BAGGETT: Mr. Gilbert.

13 MR. GILBERT: Thank you, Mr. Chairman.

14 I think my questions mostly involve Mr. Smith, also.

15 ---oOo---

16 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

17 BY MR. GILBERT

18 DR. SMITH: Morning, Mr. Gilbert.

19 MR. GILBERT: Morning, Mr. Smith.

20 You talked about conservation methods. It is obvious
21 you have studied that to some extent and done a lot of
22 analysis on it. You mentioned cascading tailwater as one of
23 the methods.

24 Are there some limitations to that as a practical
25 matter that you would like to mention?

1 DR. SMITH: Well, to be honest with you, I wish Dr.
2 Mesghinna was here because he could give you all the
3 practical limitations, and I would defer, actually to
4 that. I think the point is that I have not studied the
5 suitability of cascading systems beyond parcels throughout
6 the valley.

7 If I may link to my direct testimony, that is one of
8 the points of the wisdom of the ways the District is
9 contemplating the transaction, is why we don't want to
10 specify how to do it. Because, you know, a bunch of
11 consultants and probably what you would say a bunch of
12 District employee's consultants can't get it right.

13 MR. GILBERT: Well, it depends, sometimes they can.

14 At least the --

15 DR. SMITH: Certainly the District employees can.

16 MR. GILBERT: You never know, people surprise you
17 sometimes.

18 It didn't involve as you studied it storage of the
19 water? In other words, when the one field finished, it
20 would go directly to the next field, so timing was --

21 DR. SMITH: Timing is absolutely important. And there
22 will be some configurations of land, land ownership, where
23 storage requirements may be de minimis, so that would be the
24 greater thing since sliced bread. There will be other
25 circumstances of ownership patterns where you will need

1 significant storage or other things, and, you know what,
2 this may be a better idea.

3 MR. GILBERT: It may be that the chemicals that are
4 being used in the first field might not be suitable in the
5 second?

6 DR. SMITH: Absolutely, absolutely.

7 MR. GILBERT: Also, the releveling, would that also
8 have some limitations especially where the tile line depth
9 might be varied?

10 DR. SMITH: Absolutely. Those are things, to be quite
11 frank with you, as I testified in my direct, I saw some
12 materials on the potential costs of these things and even
13 your economist consultants noted that, you know what, these
14 materials didn't address, they had a lot of -- they had
15 implicit in them a lot of assumptions like, you just level,
16 you don't have to worry about the tile, you don't have to
17 worry about other infrastructure, and that is why I chose in
18 my testimony to rely on the benchmark technology on
19 tailwater recovery systems, only as a benchmark.

20 MR. GILBERT: There is a possibility you would say is
21 that quite a number of systems might work in a limited
22 number of cases, but in other cases some wouldn't work at
23 all?

24 DR. SMITH: Absolutely.

25 MR. GILBERT: Obviously I agree with you on that.

1 Do you suppose being an economist yourself that
2 economics might weigh heavily on the farm decision as to
3 what method you would choose?

4 DR. SMITH: I would suspect being an economist it would
5 be everything.

6 MR. GILBERT: You described a baseline method that I
7 think the District Board has at least indicated they're
8 interested in or plan to adopt, and that the farms would
9 need to demonstrate conservation from that baseline; is that
10 correct?

11 DR. SMITH: Actually, I said -- I am not trying to
12 split too many layers with you, Mr. Gilbert. There is
13 definitely a concept of baseline. I think the concept of a
14 baseline that is a target of how you measure performance, I
15 think that is pretty well accepted. There was testimony
16 yesterday, and I know you asked a question yesterday about
17 the historic rule and the particular period.

18 Given my experience of looking at a lot of
19 adjudications, contracts, quantifications throughout the
20 Western United States, there is definitely a use of a
21 historical rule. But unqualified or qualified or not, those
22 are some of the specifics yet to be ironed out.

23 MR. GILBERT: Sure. But I think you talked about a
24 baseline of use and that the land must reduce its usage
25 below the baseline.

1 Is that fair?

2 DR. SMITH: Right.

3 MR. GILBERT: The farm water user would be able to
4 either reduce his use or become more efficient under that
5 baseline?

6 DR. SMITH: Sure.

7 MR. GILBERT: So it may be that he would become much
8 more efficient and conserve the water that way or it may be
9 that he would just simply reduce his usage and maintain his
10 efficiency; is that right?

11 DR. SMITH: This gets to some of the specifics where we
12 get to, pardon the expression, like rats. We have a
13 thousand points of light right now in the valley about the
14 specific on-farm programs and whether or not we should have
15 total unbridled discretion or just measure my usage and that
16 is it, stay off my property, or whether or not there should
17 be some constraints that are related to efficiency
18 improvements or not, those are the issues that have yet to
19 be fully developed.

20 MR. GILBERT: As far as you know, so far there were no
21 efficiency baselines tied to the payments or proposed to be
22 tied to the payments?

23 DR. SMITH: We have -- there has been a lot of
24 discussion to alternatives to the historic use rule I am
25 aware of, which includes everything from giving everyone the

1 same acre-foot per acre to should we have a soil based duty,
2 should we have soil based crop, et cetera, et cetera.
3 So I mean, there is one thing about the valley, it is a
4 productive area but not only agriculture but of ideas.

5 MR. GILBERT: Yes.

6 But so far, as far as qualifying for conservation
7 payments, there has been no proposal to add efficiency
8 requirements that you know of?

9 DR. SMITH: You know, Mr. Gilbert, I probably reviewed
10 over the years eight to 12, and I am sure there must have
11 been one, because there again there may be more.

12 MR. GILBERT: All right.

13 The agreements that are contemplated for on-farm
14 conservation primarily or may be exclusively are proposed to
15 involve landowners; is that correct?

16 DR. SMITH: I think the concept of whether or not -- I
17 think it was testified yesterday only with landowners does
18 it require tenant consent. I know certainly landowner
19 tenant relationships are vital to Imperial Valley.
20 Certainly any successfully designed program must address
21 those in an effective way to be assured that our economy
22 continues and flourishes.

23 MR. GILBERT: As long as the contracts have not been
24 completely defined, they are still open?

25 DR. SMITH: Yeah.

1 MR. GILBERT: It could go any direction?

2 DR. SMITH: Right.

3 MR. GILBERT: Do you have a feel at all for what land
4 rents for in the valley per acre?

5 DR. SMITH: I have seen varied sources of data about
6 the range and variability of land rents.

7 MR. GILBERT: Some of it doesn't rent every year and
8 would have a very low average rental value and some would
9 rent all the time?

10 DR. SMITH: Right.

11 MR. GILBERT: Fairly high?

12 DR. SMITH: Reflecting productivity, market conditions,
13 specific crops, individual circumstances, financial
14 circumstances of the grower.

15 MR. GILBERT: Is it possible that the landowner, if he
16 had a contract to conserve and transfer water, might
17 evaluate the rental value of his water per acre-foot and
18 might use that as part of his basis to determine which
19 method of conservation might be the most economically viable
20 for him?

21 DR. SMITH: You know, I haven't given much thought yet
22 to how a landowner would value, weigh, the proposal, but it
23 would seem to me as an economist they would probably look at
24 in light of the contractual relations they must enter into,
25 what would be the value maximizing one. And I am not sure

1 the metric you propose in all circumstances would be
2 capturing that idea.

3 MR. GILBERT: If it was cheaper to reduce the amount of
4 water available to the ground and lower his rent than it
5 would be to put in a tailwater return system or something
6 like that, he probably would choose that method?

7 DR. SMITH: Not necessarily.

8 MR. GILBERT: Okay.

9 DR. SMITH: I think it depends on the terms of the
10 program.

11 MR. GILBERT: Economics would probably be important?

12 DR. SMITH: Absolutely. I will guarantee as long as
13 the board retains me I certainly look at the economic
14 consequences of any proposed rule and how people adapt, how
15 they would try to make decisions in light of the pure
16 economics.

17 MR. GILBERT; We do respond to economics?

18 DR. SMITH: I know you do.

19 MR. GILBERT: Do you recall approximately the amount of
20 tailwater that would be conserved by a tailwater return
21 system?

22 DR. SMITH: In my testimony I think the average amount
23 was under the Metropolitan agreement was around .65
24 acre-feet per acre. But if it is appropriate, I would like
25 to call attention to one of my attachments that show the

1 diversity around that mean. If that is --

2 MR. GILBERT: Sure.

3 DR. SMITH: That would be -- this is attachment -- Page
4 27 of Attachment C to Exhibit 4. I will get this before it
5 is over.

6 What you can see in here is a plot of the data that is
7 available of those 23 systems that permit tailwater
8 recovery. And as you can see there is great diversity of
9 experience around the .67 or whatever, which, based on
10 conversations I've had with IID staff, reflect a lot of
11 considerations, slope, cropping patterns, et cetera, et
12 cetera, that I know you are far more familiar than I.

13 MR. GILBERT: Maybe irrigation methods?

14 DR. SMITH: Irrigation methods, et cetera, et cetera.

15 MR. GILBERT: If a landowner agreed and was granted
16 permission to conserve and transfer, say, a foot and under
17 his system, tailwater return system, would conserve maybe
18 only six-tenths of a foot, do you have an idea where he
19 would get the rest of the conservation?

20 DR. SMITH: Well, certainly a concept that has been
21 under active discussion for a long time was mentioned
22 yesterday by Mr. Silva, when we said we were also
23 contemplating what is the prudent role of, if you will, a
24 secondary market where if landowner A has conserved more
25 water than he is contractually obligated to do and landowner

1 B has not, you know, we want to think how do we want to
2 facilitate the ability, both effectively and accurately, to
3 allow those two people to establish the terms of how to swap
4 that. So that certainly could be one way.

5 And by the way, that picture in many ways I think says
6 a thousand economic implications. We have to be able to
7 deal with the diversity of outcome. And the fact that
8 especially given the long-term nature of the agreements
9 contemplated here, we need the flexibility in our system,
10 mechanisms, intuitions, contractual arrangements, to be sure
11 that we can accommodate. The bottom line is we are going to
12 have variability of outcome. Not one size fits all.

13 CHAIRMAN BAGGETT: I think you answered his question.

14 MR. GILBERT: I think so.

15 You mentioned that participation rules for the on-farm
16 contract have been under discussion. Have you been involved
17 in any discussions where farmers were involved in those
18 recently?

19 DR. SMITH: Not recently.

20 MR. GILBERT: I haven't either.

21 DR. SMITH: Give me a call.

22 MR. GILBERT: On the system improvements, would you
23 call them fairly capital intensive?

24 DR. SMITH: Yes.

25 MR. GILBERT: In other words, a lot of construction?

1 So, in order to get them done in time to transfer the
2 water some debt would need to be incurred?

3 DR. SMITH: Uh-huh.

4 MR. GILBERT: The big question is is it possible to do
5 that without encumbering tangible assets, either of the
6 farmers or the District? You are pursuing that?

7 DR. SMITH: We are pursuing that. Mr. Gilbert, we've
8 heard you and your colleagues loud and clear since December
9 '97, first time you raised that question.

10 MR. GILBERT: That would have to be very helpful.

11 DR. SMITH: Yeah.

12 MR. GILBERT: If that could be done, would that
13 potentially avoid any negative impacts of transitional crop
14 reduction or fallowing or whatever, the securing of this
15 type of financing would help a lot to alleviate that problem?

16 DR. SMITH: Right now my job has been since I was
17 retained by this board related to this transaction to help
18 devise and implement nonfallowing programs. I'll guarantee
19 you I will do the best to my professional ability to be sure
20 we establish the relationships, financing mechanism, to
21 avoid that.

22 MR. GILBERT: Being not only a farmer but a member of
23 the community, I would appreciate that very much.

24 CHAIRMAN BAGGETT: Question. You will get a chance to
25 make comments. But it is questions now.

1 MR. GILBERT: About to the end.

2 Are you familiar with economic justice issue?

3 DR. SMITH: Yes. I sort of gotten more familiar in the
4 last six months in other settings.

5 MR. GILBERT: Would it become an economic justice issue
6 if the Imperial Valley were negatively impacted by the
7 transfer which benefited others?

8 DR. SMITH: I think that would certainly be an issue to
9 consider within the concept of what I'll have to say. Based
10 on limited understanding, the concept of economic justice is
11 a nascent and evolving concept. It is not quite as firm as
12 greater return on investment yet, but certainly that would
13 be an issue.

14 MR. GILBERT: Thank you, Mr. Smith.

15 Thank you, Mr. Chairman.

16 CHAIRMAN BAGGETT: Thank you.

17 I have a number of questions. Let's take a ten-minute
18 break. I have a feeling it will take more than ten minutes
19 to get the answers to these questions.

20 We will take ten minutes and come back, resume.

21 (Break taken.)

22 CHAIRMAN BAGGETT: Back on the record.

23 At the end of the day we will evaluate where we are at
24 and how to do next week.

25 I have a few questions. Mostly for Dr. Smith.

1 Surprise here.

2 ----oOo----

3 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

4 BY THE BOARD

5 CHAIRMAN BAGGETT: I guess there are two charts here
6 that are interesting. One is IID Exhibit 1A, the one with
7 all the colors. And what I am trying to understand is how
8 that relates to Attachment 2, Page 23 of Exhibit C4. You
9 talk about incremental annualized direct cost of system
10 conservations. I have a number of questions.

11 One is what the time frame -- you got 20,000 to a
12 hundred thousand acre-feet savings. First, I assume that is
13 on-farm programs?

14 DR. SMITH: No. System is system in the sense that it
15 is IID's operational systems.

16 CHAIRMAN BAGGETT: This is not on-farm?

17 DR. SMITH: This is not on-farm.

18 I just want to be sure --

19 CHAIRMAN BAGGETT: It starts at \$25. This is all in
20 present dollars, 2001 dollars. So it is not weighed for
21 inflation.

22 DR. SMITH: Inflation is eliminated. In a sense that
23 if inflation were to be 3 percent per year going forward,
24 the \$25 would grow 3 percent per year.

25 CHAIRMAN BAGGETT: The time frame on the bottom, you've

1 got acre-feet. How does that relate to Exhibit 1A in terms
2 of the incremental -- is this the first hundred thousand
3 acre-feet?

4 DR. SMITH: Well, I tell you what, it could be. For
5 example, suppose the IID Board ultimately decides first two
6 years of our obligation we are going to meet by system. We
7 would go 20, which is East Highline seepage recovery
8 project.

9 CHAIRMAN BAGGETT: Which takes no contracts with the
10 farmers?

11 DR. SMITH: Right. And then we would need three others
12 to get to 40- for the next year. And the plan may be that
13 we'll start phasing in on-farm in year three. And we would
14 have to match the phase-in of the contractual obligations
15 on-farm to equal the delivery obligations minus whatever our
16 final plan is for building out.

17 So it may be, as I said, system the first two years.
18 Maybe we start 10,000 acres on-farm the third year as a
19 hypothetical. And so we would find another 10,000 on this
20 chart to keep meeting the obligations. But ultimately we
21 have to start bringing on-farm on in some volume, because as
22 my report says bringing it to 300- -- after a hundred we are
23 tapped at systems, so he have to bring ultimately up to
24 200,000 on-farm in.

25 CHAIRMAN BAGGETT: It was my understanding you could do

1 up to 200,000 system improvements, 200,000 acres. It would
2 just be an expensive -- theoretically it is possible to save
3 that much water through system improvements. Would it be
4 cost prohibitive?

5 DR. SMITH: I want to be clear, I am using the word
6 "system." It is improvements to IID's own operational
7 systems. And certainly that is not my testimony. I am
8 unaware of any other testimony that says it is 200,000.

9 CHAIRMAN BAGGETT: In response to the question
10 yesterday, theoretically, to Dr. Mesghinna.

11 MR. OSIAS: I thought he said, although we could check
12 this, he said 200 was for the on-farm improvements. A
13 hundred was for the delivery system.

14 CHAIRMAN BAGGETT: We can go back and review the
15 record.

16 DR. SMITH: That is my recollection.

17 CHAIRMAN BAGGETT: My question is on my recollection
18 was theoretic you could get there, but as your chart shows
19 after you get to a hundred thousand and one or two, it goes
20 from 150 to --

21 DR. SMITH: Looking off the chart, the table tells you
22 what the number is, but it is pretty large.

23 CHAIRMAN BAGGETT: For all practical concerns the
24 maximum is just over a hundred thousand for system
25 improvements.

1 DR. SMITH: Right.

2 CHAIRMAN BAGGETT: So that means the remainder doesn't
3 have to come from on-farm. This could take place over the
4 first five years?

5 DR. SMITH: Five years, could take place over ten
6 years, over 15 years. What you want to think of if you want
7 to go to the preceding page where I list the system
8 projects, you can almost think of -- Page 22.

9 CHAIRMAN BAGGETT: Attachment 1 on Page 22.

10 DR. SMITH: Yes, sir.

11 You can almost think of if we were to order these by
12 costs, if that is how we end up doing them, then what would
13 happen is IID may have different years when they plan to
14 bring these things on. That is part of the final
15 determination.

16 CHAIRMAN BAGGETT: I am trying to understand a couple
17 of things on the on-farm programs, and how the commitment --
18 I guess to the extent you just answered it. If a farmer
19 decides to suspend that contract from what we have read and
20 what I've heard they can do that. IID has borrowed dollars
21 or the farmers has to pay for the on-farm improvements.
22 Where is the collateral coming from?

23 DR. SMITH: I am sorry, Chairman Baggett. I missed the
24 beginning of your question. If a farmer decides to suspend?

25 CHAIRMAN BAGGETT: If they get into this program and it

1 doesn't work for whatever reason, they quit farming, the
2 projects aren't working, there is a major catastrophe that
3 causes whatever program they are working on to not work any
4 longer.

5 DR. SMITH: Part of the development of the program
6 would have to include how we address that problem. Ideas to
7 date have included that a participant may sign up for a
8 long-term commitment, but make those commitments
9 assignable. We would have to develop the terms and
10 conditions of that assignment. So if participant A is just
11 not cutting it according to the expectations, there could be
12 a participant B. You know I can do this better than I
13 thought. There could be an assignment.

14 CHAIRMAN BAGGETT: In all of your discussions here is
15 based on, I guess, looking at cascading tailwater, the
16 recycled water systems, the recycling or tailwater recovery
17 is what you have used to base the on-farm system so far.

18 DR. SMITH: Right. It's really a benchmark technology
19 that was used. In fact, we shared the information with San
20 Diego during negotiations. And it was a way in which we
21 tried to say, look, here is -- we know those are the hard
22 costs. A lot of these untangibles that are in my report are
23 also there, and quite frankly 250 start price relative to
24 the range of direct costs. There is some headroom.

25 CHAIRMAN BAGGETT: That was the -- you just showed that

1 chart. It shows there is quite a large variability for the
2 recovery systems in terms of cost per acre-foot?

3 DR. SMITH: Absolutely. In fact, if there is only one
4 thing this Board gets from all my testimony is that there
5 will be careful to think that, you know, that you can't say,
6 and if anyone tells you definitely the cost of per acre-foot
7 is saving something by this type of technology is absent, it
8 doesn't vary, I hope I have installed in you a sense of
9 skepticism because of the variability of circumstances.

10 CHAIRMAN BAGGETT: On the cascading tailwater systems,
11 I assume -- I guess the question would be does it require
12 increased volume of leaching water to be dealt with the
13 salts if you are going from one field to the next and the
14 next? I assume salt is going to build up eventually in that
15 lowest field, the last field on the list, at a higher rate
16 if you apply direct water?

17 DR. SMITH: Right. Those are -- Dr. Mesghinna would be
18 the better one. But, certainly, I'm familiar both with his
19 testimony and with talking with growers over the years.
20 This water quality issue, which I think Mr. Gilbert even
21 referred to, and so really the scope of how far you cascade,
22 if everything else were in place, will depend on that water
23 quality issue.

24 CHAIRMAN BAGGETT: Did you account for increased
25 amount of water it would take to leach that amount of salt

1 buildup?

2 DR. SMITH: My analysis only looked at tailwater
3 recovery systems. Because in my judgment the information
4 that I reviewed on cascading systems was insufficient to
5 address many issues, including that one.

6 CHAIRMAN BAGGETT: The fact, more on economics, the
7 cost, is there -- is this going to be -- is the proposal to
8 this point strictly to credit a farmer with so much per
9 acre-foot of consumptively saved water and then the farmer
10 will decide which of these menu of conservation methods he
11 is going to use, but he gets the same amount? Or is it --
12 is that --

13 DR. SMITH: The baseline. I would imagine, although
14 this is still in development, I could foresee a solicitation
15 process, say pursuant to the board's final policy, which may
16 be historic use with or without adjustments, whatever it is,
17 among other things this is your baseline if you want to
18 participate. Then it would be what are you committed to in
19 terms of how much will you use less than that
20 baseline. And, again, getting back to my principles of and
21 diversity, pick your own menu, all the geniuses on the
22 District payroll or consultants may have missed something,
23 whatever, as long as it complied with other terms of the
24 program.

25 CHAIRMAN BAGGETT: Was the cost of monitoring of these

1 on-farm improvements, is that accounted for anywhere in here
2 or for the system improvements?

3 DR. SMITH: That would certainly -- the administrative
4 costs of the on-farm system would be part of the cost of
5 IID's administration of the program which I referenced.

6 CHAIRMAN BAGGETT: That increases with -- those costs
7 will have to increase or more detail monitoring to see who
8 consumptively is saving?

9 DR. SMITH: I imagine the final analysis we'll be sure
10 that we don't allow a system that costs us an inordinate
11 amount of money to monitor. That is why you start with a
12 menu and it may be for that reason or reasons of
13 environmental review or others that you may have to say
14 sorry, but for something.

15 CHAIRMAN BAGGETT: Finally, you seem to be waiting for,
16 your terms were, for the board to dictate terms and
17 conditions of the transfer. You have a menu of on-farm
18 programs you would like us to dictate?

19 DR. SMITH: No, no. As I understand our proposal, it
20 reflects basically the fundamentals of the San Diego
21 transaction. The way I characterize it colloquially is and
22 as the federal government, here my understanding,
23 understands and accepts this, how does San Diego know there
24 is water available to them? It is 3.1 less. And the feds
25 will be sure we only get 3.1 less the amount. As I

1 understand our petition, and I have read it, we are not
2 asking you to say, you know, what we would like you to look
3 ultimately at a list and approve A, B, C and D, but not E or
4 whatever. We are just asking you about the Imperial Dam
5 point.

6 CHAIRMAN BAGGETT: I understand. Any other questions
7 by staff?

8 MR. PELTIER: I have a question.

9 ---oOo---

10 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

11 BY STAFF

12 MR. PELTIER: Dr. Smith, you were discussing the
13 tailwater recovery system that were implemented during the
14 previous IID/Met transfer. I was wondering, do you know
15 whether those systems are still in operation?

16 DR. SMITH: It is my understanding that they are still
17 in operation. Those agreements under the Metropolitan
18 program were ten-year agreements and they are sort of -- if
19 you view them as a graduating class, it is about time for
20 those to come to the end, and I am not sure what the status
21 of renewal is.

22 MR. PELTIER: Can you tell me, do you know whether the
23 systems that have been cost-effective have they paid for
24 themselves in water savings over the term that they have
25 been in operation?

1 DR. SMITH: The Metropolitan agreement of 1998 is
2 fundamentally different from what is being proposed here.
3 The '98 agreement is Met pays the cost of those systems.
4 Then you have a technical committee that makes a
5 determination of how much they saved, and then that creates
6 an estimate of conserved water under the agreement which
7 currently the Bureau of Reclamation recognizes that Met can
8 divert that under its priority four or five right. It is
9 really a different animal.

10 MR. PELTIER: My question, though, is relating for the
11 farmers themselves presumably operating those systems allows
12 them to divert or order less water.

13 Did you have any --

14 DR. SMITH: Yes.

15 MR. PELTIER: Do you have any idea of whether -- has
16 the amount of water that they have been able to conserve
17 been sufficient to compensate for the costs regardless of
18 who paid for the construction, the cost of the systems?

19 DR. SMITH: Well, first of all, the data that was in
20 the estimated yield, that scattered chart in my testimony
21 about estimated yield, that is based on findings of the
22 technical committee as they have looked at. And based on
23 their engineering expertise, which I would pretend to second
24 case, they have concluded that that is the amount of water
25 that has been saved by each and every system.

1 So, yes, there is demonstrated evidence of savings of
2 water. In terms of its cost-effectiveness, I guess you
3 would say that there is a diversity of outcome given the
4 cost and yield of these programs so you have a dispersion of
5 costs. So we would see there is very low costs successful
6 programs and there are others that are installations and
7 others that are much more costly.

8 But under the structure of the '88 agreement, there is,
9 you know, you don't get to really -- I am not able to really
10 answer your question, does it meet some form of
11 cost-effective test, because there is no contract price here
12 to judge it against.

13 MR. PELTIER: Thank you.

14 CHAIRMAN BAGGETT: Any other questions?

15 I think to follow-up a little bit on Tom's questions, I
16 think it is significant consideration for this Board not to
17 necessarily dictate that these are the 12 to choose from,
18 but to be able to make a finding or a showing that there is,
19 in fact, there are, in fact, methods that are cost-effective
20 that can be used.

21 DR. SMITH: I would say -- I'm sorry.

22 CHAIRMAN BAGGETT: If you can -- I think that is, that
23 is what we are trying to get to.

24 DR. SMITH: I misunderstood your question.

25 CHAIRMAN BAGGETT: If you can direct us to information

1 or if you have other testimony where we can look to those.

2 DR. SMITH: What I would say is if we looked at the
3 range of costs, based on all this data that we -- let me
4 find it in my testimony.

5 CHAIRMAN BAGGETT: This is more efficient than a word
6 search on EXCEL here.

7 DR. SMITH: This would be Page 33, Attachment 12, what
8 I call Attachment 12 of C to my testimony.

9 And the title is Annualized Direct Costs Per Acre-Foot
10 of Water Conserved in 1901 Dollars by Range of Conservation
11 Yield.

12 CHAIRMAN BAGGETT: Sorry, not quite there. This is on?

13 MR. OSIAS: Page 33 of Exhibit C to IID Exhibit 4.

14 CHAIRMAN BAGGETT: Annualized Direct Costs Per
15 Acre-Foot?

16 DR. SMITH: Right. What you can see is this based on
17 the summary data that was discussed in the text of my study,
18 here is a reasonable range of conclusions you can reach
19 about what is the range. And if we think of a San Diego
20 price, for example, less estimated administration costs, so
21 on and so forth. I'm sorry, sir, I don't know your name,
22 but I misunderstood your question. That, yes, this would
23 pass a cost-effective test, given the contracts.

24 CHAIRMAN BAGGETT: That was what my follow-up was,
25 too.

1 DR. SMITH: Finally got your question.

2 CHAIRMAN BAGGETT: Very good.

3 Any redirect?

4 MR. OSIAS: Thank you.

5 ---oOo---

6 REDIRECT EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

7 BY MR. OSIAS

8 MR. OSIAS: Dr. Smith, over the break did you look at
9 the IID/San Diego contract, refresh your recollection?

10 DR. SMITH: Yes, I did.

11 MR. OSIAS: With respect to the premium that IID's
12 entitled to in a critical year as determined by river index,
13 is it 10 percent or 5 percent?

14 DR. SMITH: It's 5 percent.

15 MR. OSIAS: Following up on the questions here, let me
16 just make sure we are all on the same page and ask you to
17 clarify.

18 First of all, the pump back systems that were installed
19 in the 1988 agreement with Met, they worked to produce
20 conserved water; is that correct?

21 DR. SMITH: Right.

22 MR. OSIAS: That's been confirmed by who?

23 DR. SMITH: By a technical committee which, under my
24 recollection, includes a representative from the Bureau of
25 Reclamation, Metropolitan Water District, IID, Coachella.

1 Had to be a fifth member. Probably an outside expert.

2 MR. OSIAS: They have confirmed that they saved water?

3 DR. SMITH: That is their technical conclusion.

4 MR. OSIAS: The farmers have continued to farm on the
5 property where those systems were installed, correct?

6 DR. SMITH: That is my understanding.

7 MR. OSIAS: As far as you know, no farmer actually
8 dropped out of that program?

9 DR. SMITH: Not to my knowledge. In fact, when I was
10 looking at this data, I confirmed with staff that I had data
11 for people that deals were still working.

12 MR. OSIAS: So as far as you know, tailwater recovery
13 systems work to save water in Imperial?

14 DR. SMITH: Correct.

15 MR. OSIAS: In fact, are there other systems there
16 besides the ones put in by Met? Are you familiar --

17 DR. SMITH: I am not familiar with that.

18 MR. OSIAS: Second, as Chairman Baggett just inquired,
19 you have estimated costs for those systems based on the
20 Metropolitan experience, correct?

21 DR. SMITH: Right.

22 MR. OSIAS: That is what we looked at on Page 33?

23 DR. SMITH: Uh-huh.

24 MR. OSIAS: Will you please use a yes or no.

25 DR. SMITH: Yes.

1 MR. OSIAS: You have also determined what influences
2 the costs, correct?
3 DR. SMITH: Yes.
4 MR. OSIAS: For example, size of field?
5 DR. SMITH: Right.
6 MR. OSIAS: And that is in your report?
7 DR. SMITH: Correct.
8 MR. OSIAS: Given the volume of acre-feet that are to
9 come on-farm for the San Diego contract, have you analyzed
10 what acreage needs to be covered in order to -- if you were
11 to use tailwater pump back systems?
12 DR. SMITH: Yes, I have.
13 MR. OSIAS: Maybe you can show us that chart.
14 DR. SMITH: That would be on Page 29.
15 MR. OSIAS: Of that same --
16 DR. SMITH: Of that same Exhibit C to IID Exhibit 4.
17 MR. OSIAS: Maybe you could explain this chart for us.
18 DR. SMITH: Sure.
19 MR. OSIAS: Or is it a table?
20 DR. SMITH: It is a table.
21 MR. OSIAS: That is what I thought.
22 DR. SMITH: But since you insist allow me to go to the
23 chart on the prior page. Because it's actually useful to
24 understand the table. On Page 28 what you have here is data
25 that was provided to me by IID staff, which tells you a

1 distribution by size of field. The number of gates in that
2 field size, plus number of acres in that field size.

3 If we look at the line with the diamonds, what you can
4 see is that this is the cumulative acreage that is at or
5 below a designated field size. For example, if I were to
6 look at the 80 to 120 size, I go up to the diamond. I have
7 to look to the right because cumulative acreage is plotted
8 on the right, and that says roughly over 200,000 acres is in
9 field sizes at or below that size.

10 With that information now we go to Page 29, and what I
11 do is using the assumption that sort of medium assumption
12 that from the Met experience that a tailwater recovery
13 system averages .65 acre-feet per acre. I apply that to the
14 number of acres that are at or below these thresholds to
15 calculate what is the maximum yield of on-farm
16 conservation. And what you can see is that if we had a
17 program that targeted only field sizes above 300, the
18 maximum yield would be 18,000 acre-feet, 296 acre-feet.

19 MR. OSIAS: 18,296?

20 DR. SMITH: 18,296. What is in the rest of the column
21 is what would be the participation rate required to get
22 different targets of on-farm conservation. That is an NA,
23 just numbers don't work. And as you move up the table, you
24 can see as we get to thresholds, like at 120, we get down to
25 120. If we want to get up to 175 on-farm, we need a 98

1 percent participation rate. But if we go down to 80
2 percent, we can even get to 200,000 acre-feet with a 72
3 percent participation rate. There may be some build laws
4 out there. We are not going to get a hundred percent
5 participation.

6 MR. OSIAS: That is 72 percent of the acreage?

7 DR. SMITH: Of the acreage, right. So the point was
8 that we had to think of extending economic viability down to
9 these sizes to have a hope of yielding a significant amount
10 of on-farm conservation.

11 MR. OSIAS: Your analysis showed that the smaller the
12 field size the higher the cost per acre-foot conserved from
13 a pump back; is that correct?

14 DR. SMITH: Yes. Actually, it is the capital
15 investment per acre is significantly related to field size.

16 MR. OSIAS: Was this analysis used in coming to an
17 agreed upon price structure with San Diego?

18 DR. SMITH: Yes, it was.

19 MR. OSIAS: In your opinion, does the price received
20 from San Diego allow on an economic basis tailwater recovery
21 systems to be put in on sufficient fields of sufficient
22 small size to meet up to 200,000 acre-feet of conserved
23 water?

24 DR. SMITH: That is my judgment at the time we
25 negotiated the transaction and my judgment today.

1 MR. OSIAS: That is all I have.

2 CHAIRMAN BAGGETT: Thank you.

3 MR. SLATER: Just a very brief clarification.

4 ---oOo---

5 RE-CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

6 BY SAN DIEGO COUNTY WATER AUTHORITY

7 BY MR. SLATER

8 MR. SLATER: To be clear, your response to Mr. Osias'
9 question was to clarify that a shortage was 5 percent?

10 DR. SMITH: Premium.

11 MR. SLATER: Premium. And this references the shortage
12 premium under the San Diego contract?

13 DR. SMITH: My recollection, I think I misstated is 10
14 percent.

15 MR. SLATER: To be clear, there are three conditions
16 that could trigger a shortage premium?

17 DR. SMITH: Right.

18 MR. SLATER: The three conditions are, one, the
19 critical year shortage that you mentioned, correct?

20 DR. SMITH: Correct.

21 MR. SLATER: Second is a declaration by the Secretary
22 of Interior, correct?

23 DR. SMITH: Correct.

24 MR. SLATER: The third is?

25 DR. SMITH: Even if those other two conditions do not

1 occur if, in fact, San Diego finds themselves in a situation
2 where they experience a shortage of water.

3 MR. SLATER: And each one of those independent
4 conditions could trigger a premium under the contract,
5 correct?

6 DR. SMITH: That is correct.

7 MR. SLATER: Thank you.

8 CHAIRMAN BAGGETT: Tribes?

9 No.

10 Defenders of Wildlife?

11 No.

12 Farm Bureau.

13 Mr. Du Bois. Only to the information that is provided
14 on the redirect.

15 MR. DU BOIS: Mr. Smith, I believe that you testified
16 that to the best of your ability you would help the IID
17 prevent resorting to fallowing in order to generate this
18 conserved water; is that correct?

19 MR. OSIAS: Objection. Beyond the scope of the
20 redirect.

21 CHAIRMAN BAGGETT: You are limited now only to asking
22 questions on the redirect testimony, what he just asked.

23 MR. DU BOIS: He testified to that.

24 You did discuss fallowing with Mr. Gilbert?

25 CHAIRMAN BAGGETT: That was -- on redirect the only

1 thing -- you could have asked that the first time around
2 when you first asked questions. Now your questions are
3 limited to what Mr. Osias just asked the witness in his
4 last round of questions, and only on those narrow issues on
5 reclaimed or tailwater pumping systems and those charts
6 which he just showed. You can only ask questions on that
7 now.

8 MR. DU BOIS: I appreciate your counsel.

9 MR. OSIAS: Mr. Chairman, also just to help Mr. Du
10 Bois, Mr. Smith will be here during Phase II. He did
11 testify in Phase II in written form about fallowing. If you
12 have questions about fallowing, you can examine him --

13 CHAIRMAN BAGGETT: You can ask those. You will get
14 plenty of time then.

15 Mr. Gilbert.

16 MR. GILBERT: No questions.

17 CHAIRMAN BAGGETT: This panel is dismissed. You have
18 one other witness. See if we can do the last one. Maybe we
19 get done with your case by lunch. That would be nice. I
20 have to break at five till, so let's see what we can do.

21 MR. OSIAS: This witness needs to leave by 1:30.

22 (Oath administered by Chairman Baggett.)

23 MR. OSIAS: Professor Thompson, do you have in front
24 of you Exhibit 5?

25 DR. THOMPSON: I have in front of me my testimony, but

1 it doesn't have an exhibit number on it.

2 MR. OSIAS: That is IID Exhibit 5. That is your
3 signature at the end of that exhibit?

4 DR. THOMPSON: Yes, it is.

5 MR. OSIAS: It attaches a report that you prepared?

6 DR. THOMPSON: It has various attachments, but my
7 testimony consists of the pages prior to the signature
8 itself.

9 MR. OSIAS: You signed it under oath?

10 DR. THOMPSON: Yes, I did.

11 MR. OSIAS: Please describe for us your current
12 position and your educational background.

13 DR. THOMPSON: My current position is I am Vice Dean
14 and a professor of natural resources law at Stanford Law
15 School. I am also a senior scholar at the Institute for
16 International Studies and on the executive committee of
17 what is known as IPER, the Interdisciplinary Program
18 Environment and Resources, which is an interdisciplinary
19 program for graduate students at Stanford on natural
20 resource and environmental issues.

21 My educational background is a Bachelor's in economics
22 from Stanford University and also a JD and an MBA from
23 Stanford University.

24 MR. OSIAS: Were you Phi Beta Kappa?

25 DR. THOMPSON: Yes, but I generally don't advertise

1 that fact.

2 MR. OSIAS: Do you subscribe to Stratacon?

3 DR. THOMPSON: No.

4 MR. OSIAS: Your work experience has focused in some
5 part on water; is that correct?

6 DR. THOMPSON: Yes. Since I first started teaching at
7 UCLA law school in the late 1980s I have taught water law on
8 a regular basis. I am also the coauthor of one of the
9 leading case books on water resources which is actually
10 fairly easy because there are only three case books on water
11 resources. Most of my scholarship is focused on water
12 issues. In fact, a significant portion of the water
13 scholarship has focused on the importance of water markets.

14 In addition to the scholarship, I also served on the
15 expert committee which drafted the Model Water Transfer Act
16 which was published in 1996.

17 MR. OSIAS: Have you also acted as a lawyer with
18 respect to water matters?

19 MR. THOMPSON: I have acted as a lawyer in connection
20 with water matters. I have also represented a variety of
21 farmers, public districts and environmental organizations in
22 connection with water markets and related issues.

23 MR. OSIAS: You've extensively published articles on
24 the subject?

25 DR. THOMPSON: I published a number of articles on

1 water markets and also done a variety of presentations on
2 water markets in California as well.

3 MR. OSIAS: Would you briefly describe for us the
4 matters that Imperial Irrigation District asked you to
5 address in connection with this State Board proceeding?

6 DR. THOMPSON: Imperial Irrigation District asked me to
7 provide testimony about the importance of water markets in
8 the broader context of California water policy.

9 MR. OSIAS: Also with respect to the significance of
10 this proposed transfer to San Diego and QSA, did you also
11 provide testimony relating to that?

12 DR. THOMPSON: What IID asked me to do was to
13 specifically talk about the importance of the proposed
14 IID/San Diego transfer to California water markets. In
15 connection with that I've also looked at a variety of other
16 documents such as the QSA.

17 MR. OSIAS: Why don't you briefly tell us your
18 conclusions that you reached.

19 DR. THOMPSON: My conclusion is that the proposed
20 IID/San Diego water transfer is important to California
21 water policy in a variety of ways. And I think it can be
22 summarized in three specific forms.

23 The first one is that the proposed water transfer is of
24 critical importance in helping Southern California meet its
25 water needs. As my testimony elaborates, as I believe some

1 of the witnesses talked about yesterday, Southern California
2 is water constrained. Only approximately 40 percent of
3 Southern California's water comes from local supplies. As a
4 result, it has had to rely historically on three sources of
5 imported water: the Owens Valley through the LADWP, the
6 Colorado River and Northern California through the State
7 Water Project.

8 It is very unlikely that the Southern California
9 coastal cities will receive more water from any of those
10 sources in the short or medium term and, in fact, Southern
11 California is or already has faced reduced supplies from
12 each of those various sources. So that, as we know from
13 this particular proceeding, California is facing the need to
14 reduce its diversions from the Colorado River. The L.A.
15 Department of Water and Power is facing about a third
16 cutback in the amount of water it receives from the Owens
17 Valley. And as a result of endangered species issues and
18 Central Valley Project Improvement Act and various other
19 environmental issues, Southern California will be receiving
20 less water from the State Water Project.

21 That means you have to look elsewhere for satisfying
22 the needs of Southern California coastal cities and water
23 markets, and in particular these proposed transfers are
24 essential if Southern California is to meet those particular
25 needs. That is its first observation about the importance

1 of this particular transfer.

2 The second importance of this proposed transfer is that
3 it is important in helping California to resolve a number of
4 what appear in the past frequently to be intractable water
5 disputes. Without water markets most water disputes look to
6 be zero sum gains. The only way in which you can help
7 satisfy the needs of one set of water users, including, for
8 example, environmental water users, appears to be to require
9 other water users to do with less than they've historically
10 done with. That means that those water disputes end up
11 being the subject of litigation or being the subject of
12 large political wars.

13 One of the things that a variety of recent governmental
14 and private studies have recognized is that water markets
15 can help resolve those type of disputes without necessarily
16 the need for litigation or for political struggles. Water
17 markets provide a voluntary means of encouraging
18 conservation, a voluntary means for moving water around and
19 that additional flexibility and additional incentives makes
20 it easier to resolve disputes. So it is not surprising in
21 this particular case that we have seen that out of IID's
22 proposal to transfer water to San Diego we have found a
23 mechanism that has helped us resolve California's dispute
24 with the other six Colorado River states and also to find a
25 means of helping to resolve the battles between various

1 Southern California water agencies over the water of the
2 Colorado River.

3 It is also true that as a result of transfers such as
4 the proposed IID/San Diego transfer that that takes pressure
5 off of the Delta and makes it easier for us to reach
6 agreements on how we are going to manage the Delta to
7 protect Northern Californians and the Delta environment
8 while meeting the needs of Southern California.

9 MR. OSIAS: Let me just interrupt. When we talk about
10 this issue, we have to specify which delta. You are
11 speaking about the Bay-Delta in Northern California and not
12 Colorado River Delta, right?

13 DR. THOMPSON: That's correct. I am talking about the
14 Delta formed by the San Joaquin and Sacramento Rivers

15 The third way in which the proposed IID/San Diego
16 transfer is important is as a model for future water
17 transfers in the state of California. And the IID/San Diego
18 transfer can serve as a very important model in the future
19 in two different ways.

20 First of all, as a model in a large scale, long-term
21 conservation transfer and second as a transfer which has
22 been initiated by a major irrigation district in the state
23 of California. It is worth going over each of those two
24 points.

25 Virtually every governmental study that has looked at

1 water policy has said that water markets are of critical
2 importance because they can encourage conservation. They
3 provide an incentive for conservation and provide funding
4 for conservation. Most of the transfers that you've seen in
5 the state of California in the past however, have been
6 short-term transfers. And short-term transfers, although
7 they can provide incentive for some conservation, do not
8 provide the type of incentive that you need for the type of
9 conservation that we have been discussing over the past two
10 days at IID.

11 To engage in the type of conservation that, for
12 example, Dr. Smith was talking about this morning, you need
13 a fair amount of resources to invest in the conservation and
14 also needs to be long term because frequently these
15 conservation measures continue to cost money over time. So
16 short-term transfers simply do not provide the type of
17 incentive that you need for major conservation measures of
18 the type that Imperial Irrigation District is considering.

19 That conservation is very important because
20 conservation means that we can take the same water resources
21 and use it for more consumptive uses, and we can do that
22 without the type of significant economic and social impact
23 that a county such as Imperial County would be concerned
24 about. So here we have, again, a model for a conservation
25 transfer where a District is proposing a long-term transfer

1 that will be insufficient funding to permit significant
2 on-farm and system conservation, and can do so with the
3 promise they are not going to be fallowing, but instead they
4 are going to be conserving water so are actually expanding
5 the amount of consumptive use we have for that same water.
6 That is the first way in which this can be a model water
7 transfer.

8 The second way in which this is a model water transfer
9 is the fact that here we have a district, the Imperial
10 Irrigation District, that actually set out on its own to
11 look into the opportunities for transferring water to a
12 urban region. As anyone who has looked at the history of
13 water transfers in California, anywhere else in the Western
14 United States, knows that is pretty unusual. Most districts
15 have been scared of water transfers and have resisted the
16 notion of transferring their water resources to other
17 areas.

18 Here we have a district that has stepped forward. And
19 so this transfer can be forwarded, it is, again, a model of
20 what other districts might be able to do, which is to act as
21 a facilitator for conserving water and using that to help
22 resolve California disputes by meeting the needs of other
23 areas.

24 MR. OSIAS: The flip side I take it, then, is if this
25 transfer does not go forward there are negative

1 repercussions in each of the areas that you have just
2 identified as the positive if it should happen; is that
3 right?

4 DR. THOMPSON: That's correct. So if the transfer
5 doesn't go forward, you have a more difficult time meeting
6 the water needs of the Southern California coastal cities.
7 You open up a variety of disputes that this particular water
8 transfer appears to have resolved, make it more difficult
9 for other disputes to be resolved. And, finally, and this
10 is important, is that if you're another water district in
11 California, if you are an irrigation district, a county
12 water district, you are looking to see how this particular
13 transfer goes forward. And water districts, as I mentioned,
14 have been afraid of these types of transfers. They have
15 been afraid if they step forward with a transfer, that it
16 might lead in some fashion to forfeiture of their water
17 rights. That is something that the California state
18 Legislature has helped resolve through its foresight over in
19 past legislation.

20 But there are other things that water districts are
21 also concerned about. They are concerned that if they come
22 forward with this type of conservation transfer, that it
23 might lead to some type of order that rather than simply
24 conserving water maybe they have to fallow some of their
25 lands. And that possibility is something that would

1 frighten other water districts.

2 So it is very important not only for meeting the needs
3 of Southern California, but in encouraging future water
4 transfers that this transfer go forward.

5 MR. OSIAS: Maybe, lastly, I can ask you to touch on
6 this subject. As you may know, several environmental groups
7 have filed protests in connection with this transfer. The
8 finding of the Board relating to whether there is an
9 unreasonable effect is Phase II. But could you discuss in
10 your work and in the Model Water Transfer Act setting and in
11 this setting how you see markets and environmental, I don't
12 know whether you want to call them needs or wishes, but
13 environmental interests, how can they be reconciled through
14 a market transaction and how does that relate, if at all, to
15 what you see going on in this case?

16 DR. THOMPSON: Markets can be very valuable in
17 addressing environmental concerns in a state like
18 California. And so perhaps not surprising that one of the
19 first entities that became interested in the possibility of
20 a transfer between the Imperial Irrigation District and
21 Southern California coastal cities was an organization which
22 used to be known as the Environmental Defense Fund, which is
23 now simply known as Environmental Defense. And the
24 Environmental Defense Fund became interested in the possible
25 transfer from Imperial Irrigation District in the early

1 1980s at the time that the Peripheral Canal was being
2 considered. The Metropolitan Water District was a major
3 proponent of the Peripheral Canal.

4 One of the arguments that they used for the Peripheral
5 Canal was that they knew down the line they were going to
6 lose a significant amount of water that they were obtaining
7 from the Colorado River. Their argument was in order to
8 make up for that loss from the Colorado River we would have
9 to move more water from Northern California, and one way of
10 moving more water from Northern California would be to build
11 the Peripheral Canal.

12 The Environmental Defense Fund thought that was the
13 wrong way of going about meeting the deficit that would come
14 from loss of Colorado River water. And that rather than
15 jeopardizing the Delta of the San Joaquin and Sacramento
16 River and the environment of Northern California, that it
17 made more sense to look for a Southern California solution.
18 The most obvious of which was to get farming regions, such
19 as the Imperial Irrigation District, to conserve water and
20 move it to the Southern California coastal region.

21 So water transfers by permitting you to take water that
22 is already in use and conserving and finding ways of making
23 more consumptive use of that water can actually relieve
24 pressure on the environment elsewhere in the state.

25 Another way of thinking about that this is that

1 historically the Southern California coastal cities, when
2 they needed more water, went to a virgin watershed and took
3 water out of the river. So we started out by taking water
4 out of the Owens River in the Owens Valley. We then went
5 and started diverting water from the Colorado River. We
6 then went and started diverting water out of Sacramento-San
7 Joaquin Delta. From an environmental standpoint that cannot
8 work in the future. Water transfers are the other mechanism
9 that you can then use for encouraging conservation and
10 helping to meet those particular needs.

11 MR. OSIAS: Are you also aware of any other settings
12 environmental transfers themselves have involved purchase of
13 water to solve environmental needs? Market transactions?
14 Maybe market is not right.

15 DR. THOMPSON: It is a good use of the term. One of
16 the things that we have seen over the last ten years is an
17 increase in the use of markets to acquire water for
18 environmental purposes. And so you can actually track the
19 increase in the amount of water which the government or
20 environmental organizations are acquiring from farmers and
21 other water users through market transactions. And, in
22 fact, another one of the essential elements for solving the
23 problems of the San Joaquin-Sacramento Delta has been the
24 environmental water account. And the environmental water
25 account is going out on the market, obtaining water through

1 market transfers and then using that to help reduce the
2 diversions through the pumping facilities in the San
3 Joaquin-Sacramento Delta.

4 So this is increasing in use, and I would -- I believe
5 based on everything that I have seen and everyone that I
6 talked to, that environmental organizations and government
7 will be making more use of it in the future.

8 MR. OSIAS: They pay for that water?

9 DR. THOMPSON: They pay for that water. This is,
10 again, voluntary transactions in which farmers or other
11 water users make the water available as the result of
12 payments from the government or the environmental
13 organizations. There are some water users that occasionally
14 do it for the tax deduction, but they are still doing it for
15 the money. It is just the federal government providing the
16 money rather than whatever governmental agency or nonprofit
17 wants to acquire the water.

18 MR. OSIAS: Thank you.

19 Nothing further.

20 CHAIRMAN BAGGETT: Mr. Slater.

21 MR. SLATER: No questions from San Diego.

22 CHAIRMAN BAGGETT: Defenders of Wildlife, Mr. Fletcher.

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1 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

2 BY DEFENDERS OF WILDLIFE

3 BY MR. FLETCHER

4 MR. FLETCHER: Good morning, Professor Thompson.

5 DR. THOMPSON: Good morning.

6 MR. FLETCHER: Just a few short questions.

7 You mentioned the ways in which this transfer could be
8 a model transfer. You're familiar with, I believe you're
9 one of the authors, of the Model Water Transfer Act, and
10 attachment to your testimony?

11 DR. THOMPSON: Yes.

12 MR. FLETCHER: That model transfer or Water Transfer
13 Act like the California Water Code contains provisions that
14 no transfer should be approved if it has unreasonable
15 impacts on fish and wildlife; is that correct?

16 DR. THOMPSON: It is correct that one of the things
17 that the Model Water Transfer Act provides is that
18 environmental effects should be considered and you should
19 not go forward if there are unreasonable effects.

20 MR. FLETCHER: I guess a follow-up, then, in your
21 expert opinion a model transfer would address in a
22 reasonable fashion fish and wildlife impacts and other
23 environmental impacts?

24 DR. THOMPSON: One of the things that water transfers
25 should do is they should consider the environmental impact.

1 They should look to see what methods might be available to
2 mitigate particular impacts, and to the degree that impacts
3 cannot be mitigated, then you have to look at the tradeoffs
4 between the benefits, potential cost from environmental
5 standpoint of the transfer.

6 MR. FLETCHER: Thank you.

7 You also mentioned that water agencies and your
8 irrigation districts around the state and probably in other
9 states as well will be looking to this transfer as, I don't
10 want to use the word "precedent," but as a model possibly to
11 emulate.

12 In your opinion, will other interested stakeholders, in
13 other words, those interested in third-party impacts,
14 environmental impacts in the area from which the water is
15 transferred also will be looking to this transfer to
16 evaluate their general position on whether water transfers
17 can have or do sometimes have detrimental impacts to fish
18 and wildlife within the area from which that water is
19 transferred?

20 DR. THOMPSON: All stakeholders in the water field will
21 look to see how the Board addresses the San Diego/IID
22 transfers, in looking to see whether or not they are
23 interested themselves in engaging in transfers and how they
24 should approach future transfers.

25 MR. FLETCHER: Moving on to another topic.

1 In your direct testimony you mentioned that the
2 environmental organizations, Environmental Defense, has a
3 record off strongly supporting water markets; is that
4 correct?

5 DR. THOMPSON: That's correct.

6 MR. FLETCHER: You also mentioned, at least in your
7 written testimony, that Environmental Defense has long been
8 a proponent of transfers between the Imperial Irrigation
9 District and Southern California coastal region?

10 DR. THOMPSON: The Environmental Defense Fund was one
11 of the first organizations to look at potential transfers.
12 They wrote a report in the early 1990s that discussed the
13 possibility of transferring water from IID to San Diego in
14 extensive detail, recommended it and as something that the
15 state should pursue. And since that time Environmental
16 Defense Fund has played a role in trying to facilitate that
17 transfer.

18 MR. FLETCHER: Are you aware that in a letter dated
19 April 18th, a policy statement submitted in this proceeding,
20 I believe that is part of the record or will be,
21 Environmental Defense did reiterate its support of the
22 transfer but additionally stated that the mitigation, the
23 various programs proposed for third-party impacts, both
24 environmental and economic, I guess, I will just quote from
25 it. They are hardly -- they are not the foundation -- now I

1 am quoting -- for a serious remedial program.

2 DR. THOMPSON: I have not seen that letter so I cannot
3 testify to it.

4 MR. FLETCHER: Thank you.

5 CHAIRMAN BAGGETT: Farm Bureau.

6 MR. RODEGERDTS: No.

7 CHAIRMAN BAGGETT: Mr. Du Bois.

8 ---oOo---

9 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

10 BY MR. DU BOIS

11 MR. DU BOIS: I hate to further expose my lack of
12 experience as an attorney, since I have absolutely known.

13 DR. THOMPSON: Actually, I think you have done an
14 exceptionally good job.

15 MR. DU BOIS: I understand you are professor of natural
16 resources.

17 DR. THOMPSON: That is correct.

18 MR. DU BOIS: As a professor of natural resources it is
19 reasonable, I believe, for you to be concerned with the
20 nation's food supply?

21 DR. THOMPSON: That is correct. I have not myself
22 taught agricultural law. And, therefore, I have not spent
23 significant period of time looking at agricultural law
24 except to the degree that they affect water usage.

25 MR. DU BOIS: Do you have any idea of the relationship

1 between the amount of food imported into the United States
2 and the amount of food exported by the United States?

3 DR. THOMPSON: No, I'm afraid that is not within my
4 area of expertise.

5 MR. DU BOIS: Do you have an opinion on whether water
6 markets will eventually have affects on the availability of
7 fresh foods, fruits, vegetables, to California?

8 DR. THOMPSON: This, again, is something that I have
9 not specifically looked at in the question of the actual
10 impact. Depends a lot on the type of water transfers that
11 we see. Again, one of the model aspects of the proposed
12 IID/San Diego water transfer is that it focuses on
13 conservation rather than fallowing of lands. That means
14 that we should be able to produce essentially the same
15 amount of crops as we have historically produced while at
16 the same time making more water available for Southern
17 California coastal cities.

18 So, again, it will depend an awful lot on the nature of
19 water transfers. It also depends to a large degree on the
20 development of agricultural technology which, as we have
21 seen in the past, has actually permitted us to produce more
22 and more with the same amount of land.

23 MR. DU BOIS: Dr. Thompson, have you considered the
24 affect that this conservation and transfer of water will
25 have on the Salton Sea?

1 DR. THOMPSON: No, I have not. That is not something
2 that I have examined.

3 MR. DU BOIS: No further questions.

4 CHAIRMAN BAGGETT: Thank you.
5 Mr. Gilbert.

6 MR. GILBERT: No questions.

7 CHAIRMAN BAGGETT: Staff.

8 Mr. Rossmann, I apologize.

9 MR. ROSSMANN: Even he was waiting for me.

10 DR. THOMPSON: I saw him trying to get up over
11 here.

12 MR. ROSSMANN: Your Honor, I have in mind your
13 schedule and his. I will do my best to comply with all of
14 those.

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16 CROSS-EXAMINATION OF IMPERIAL IRRIGATION DISTRICT

17 BY COUNTY OF IMPERIAL

18 BY MR. ROSSMANN

19 MR. ROSSMANN: This is a rare privilege which I will
20 not abuse. But I think we should all be grateful that
21 Professor Thompson has lent his expertise to this
22 participation.

23 Thank you, sir, for coming here.

24 DR. THOMPSON: You're welcome.

25 MR. ROSSMANN: I want to focus on, if you will, the

1 model aspects that this transfer can achieve.

2 Is it your view that, if fallowing were a part of this
3 transfer, it should not be allowed if the Board found that
4 that produced an unreasonable impact on the economy of
5 Imperial County?

6 DR. THOMPSON: If this transfer were to permit
7 fallowing, which, again, is something which currently this
8 transfer does not permit, but on that hypothetical, one of
9 the things that the Board would have to look at would be its
10 impact on the local economy. And if the Board concluded
11 that that was unreasonable in light of the facts involving
12 the transfer, looking at all the various costs and benefits
13 of the transfer, then that would be a transfer that this
14 Board under California law would not be permitted to
15 approve.

16 MR. ROSSMANN: Thank you, sir.

17 The Model Transfer Act does recognize fallowing for
18 temporary, short-term transfers; is that correct, as an
19 appropriate means of securing that short-term transfer?

20 DR. THOMPSON: That's correct. The Model Water
21 Transfer Act actually tried to make a distinction between
22 transfers that involved conservation and those that do not
23 provide conservation. In the case of short-term transfers
24 involving conservation, there was a fast track provision in
25 there. In cases involving fallowing, the Model Water

1 Transfer Act anticipated a longer proceeding with a greater
2 burden of proof on the part of the proponent of the
3 transfer.

4 MR. ROSSMANN: Thank you, sir.

5 In those short-term fallowing provisions, if a county
6 can show that its tax base or its social services have been
7 impacted by the short-term transfer, it is entitled to
8 secure compensation for that loss; is that correct?

9 DR. THOMPSON: Under the expedited procedure in the
10 Model Water Transfer Act one of the things that we were
11 concerned about was the possibility that those short-term
12 transfers might be held up by considerations of what the
13 impact might be on the local community. And, therefore,
14 there was a provision in there that there would be a fund
15 provided out of which if there was any impact on the local
16 community, then those impacts could be compensated through a
17 separate fund so that the transfer could go forward without
18 having to address those local economic issues.

19 MR. ROSSMANN: Final question on the Model Act.

20 As I read it, it recognizes that the Board of
21 Supervisors of the county of the transfer of origin are
22 singled out together with the Department of Fish and Game
23 for special standing in this Board's proceedings; is that
24 correct?

25 DR. THOMPSON: You have to point me to that particular

1 provision.

2 MR. ROSSMANN: Section 403, sir. Unfortunately I can't
3 give you a page number.

4 DR. THOMPSON: If you are looking at Section 403(d)
5 there is a provision that says that any protest, any written
6 protests which are filed with the Board would be provided
7 to the petitioner, to the California Department of Fish and
8 Game and to the Board of Supervisors of the county or
9 counties that the transfer is arising in.

10 MR. ROSSMANN: Yes, sir.

11 Under Subdivision F, the Board of Supervisors alone
12 with the petitioner and Fish and Game would have the
13 opportunity to file a written response or protest, under
14 that Subdivision F; is that correct?

15 DR. THOMPSON: Subdivision F does provide the
16 petitioner, California Department of Fish and Game and the
17 Board of Supervisors and the proposed transferee and any
18 other party who has filed a written protest, would have an
19 opportunity to respond in writing to the Board's analysis.

20 MR. ROSSMANN: Thank you very much.

21 Just two questions, sir, on your testimony.

22 I believed you testified that Environmental Defense
23 issued their report in the early 1990s; that was what you
24 testified to, at least. Wasn't that the early 1980s?

25 DR. THOMPSON: Yeah. If I said early 1990s, I was

1 mistaken. 1983 was the actual date of the Environmental
2 Defense Fund study.

3 MR. ROSSMANN: Finally, sir, was it late 1980s or early
4 1980s that you taught at UCLA?

5 DR. THOMPSON: It was actually, I believe, in the late
6 1970s and early 1980s that I taught at UCLA.

7 MR. ROSSMANN: I just want the record to show that you
8 preceded your interrogator in that respect.

9 Thank you very much, sir.

10 CHAIRMAN BAGGETT: Thank you.

11 No redirect.

12 MR. SLATER: Mr. Chair, I actually would like to ask a
13 follow-up question based on response to Mr. Rossmann's
14 question. He followed me in order and raised material.

15 MR. ROSSMANN: Your Honor, I testified -- I examined
16 him on his Exhibit B.

17 CHAIRMAN BAGGETT: I agree. I will deny it.

18 Mr. Katz.

19 MEMBER KATZ: Surprising. One question earlier on you
20 had referenced reduction in supplies and you referred to
21 L.A. losing water as a result of Mono Lake.

22 DR. THOMPSON: Yes.

23 MEMBER KATZ: Is it not also true that the City of L.A.
24 was compensated for that, offsets, and that to this date
25 they have chosen at least some of which they have not

1 utilized?

2 DR. THOMPSON: That is correct.

3 CHAIRMAN BAGGETT: Any other questions?

4 Staff?

5 I have none.

6 Does that conclude your --

7 MR. OSIAS: Yes.

8 CHAIRMAN BAGGETT: Imperial Irrigation District's case

9 in chief?

10 MR. OSIAS: Yes, that does conclude. I would like to
11 move into evidence all of our exhibits. As one housekeeping
12 matter, under Exhibit 1, which was the testimony of Mr.
13 Silva, we added Exhibit 1A, which we had previously
14 identified as the multi-colored chart.

15 Under Exhibit 2 we have two reports and a graphic that
16 was used newly in the hearing, but was merely an
17 illustration. We labeled that one 2A. I would like that
18 one to go in as well.

19 And there has been much reference to Exhibit 22 in the
20 discussion, that is QSA agreement. In fact, our Exhibit 22
21 was the QSA plus all of the related agreements. We would
22 like to renumber those 22A, B, C, D and E for each of the
23 agreements and 22A is the QSA itself. That is just so it's
24 easier reference for staff when they refer to them.

25 And with that we would offer in all of the testimony,

1 all of which has been validated under oath and all the
2 exhibits. We received no objections to any of them.

3 CHAIRMAN BAGGETT: If no objections, they are so
4 entered. With that, let's come back at 1:00 and we will
5 finish San Diego's. Do that today.

6 Thank you.

7 (Luncheon break taken.)

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AFTERNOON SESSION

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CHAIRMAN BAGGETT: Since we are on such an efficient schedule here.

Do we have any? I understand you want to make a comment first.

MR. ROSSMANN: Your Honor, yes, about our hearing order, just so that all the parties would have this understanding. We have three witnesses and they were all listed for Phase II. And yet in the hearing order it indicated that you expected us to present a case in chief in Phase I.

I just wanted to make sure everyone was comfortable with the notion that we will present our entire case in Phase II and reserve our opening statement for that time.

CHAIRMAN BAGGETT: Very good. I don't have you on my list of witnesses.

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DIRECT EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

BY MR. SLATER

MR. SLATER: Good afternoon. Can you both state your name and spell it for to the record, please?

MS. STAPLETON: Maureen Stapleton, S-t-a-p-l-e-t-o-n.

MR. WEINBERG: Ken Weinberg, W-e-i-n-b-e-r-g.

MR. SLATER: Ms. Stapleton, can we start with you.

1 Is there a document in front of you identified as San
2 Diego Exhibit No. 1?

3 MS. STAPLETON: Yes.

4 MR. SLATER: Would you take a look at that, please? Do
5 you recognize it?

6 MS. STAPLETON: Yes, I do.

7 MR. SLATER: What is it?

8 MS. STAPLETON: It is my testimony.

9 MR. SLATER: Have you had an opportunity to review it
10 recently?

11 MS. STAPLETON: Yes.

12 MR. SLATER: Do you wish to make any changes to your
13 testimony?

14 MS. STAPLETON: No.

15 MR. SLATER: Is it otherwise true and correct?

16 MS. STAPLETON: Yes.

17 MR. SLATER: Can you please state your present
18 position?

19 MS. STAPLETON: I am the General Manager for the San
20 Diego County Water Authority.

21 MR. SLATER: How long have you held that position?

22 MS. STAPLETON: Since January 1996.

23 MR. SLATER: Can you briefly describe your educational
24 background and qualifications as they relate to the subject
25 matter of this hearing?

1 MS. STAPLETON: I have a Bachelor of Science and a
2 Master's in public administration. I have been in public
3 administration for over 20 years and have served the Water
4 Authority since 1996.

5 MR. SLATER: I think behind you we have an exhibit
6 previously marked as San Diego Exhibit 44. Can you briefly
7 go to the map and identify the area in which the San Diego
8 County Water Authority is located?

9 MS. STAPLETON: The Water Authority is outlined by the
10 black line on this exhibit and it runs from the Orange
11 County and Riverside border to the north all the way down to
12 the international border on the south.

13 MR. SLATER: I think we brought up on the screen what
14 we are proposing to mark as San Diego Exhibit 45 for
15 demonstrative purposes, which appears to be a map.

16 Ms. Stapleton, would you care to describe the nature of
17 the boundaries of the District and your member agencies that
18 are within this area.

19 MS. STAPLETON: The district covers over 1,400 square
20 miles and about 96 percent of the population of San Diego
21 County. We have 23 member agencies who are retailers
22 throughout the county, and they have a representative that
23 serves on my Board of Directors.

24 MR. SLATER: Can you briefly describe the water supply
25 sources that are available for the Authority to distribute

1 to its customers?

2 MS. STAPLETON: The Authority has basically two sources
3 of supply for total water use in the region. One is local
4 supplies and the Water Authority supplies all imported water
5 into San Diego County region. In our service area we have
6 one sole supplier which is Metropolitan Water District, and
7 they receive their water from the Bay-Delta and the Colorado
8 River.

9 MR. SLATER: On an annual basis roughly how much water
10 does the Authority distribute to its customers?

11 MS. STAPLETON: We distribute approximately 600,000
12 acre-feet of water each year.

13 MR. SLATER: Has the lack or absence of diversity in
14 the water supply that you described had any impacts on the
15 Authority's reliability?

16 MS. STAPLETON: Yes, it has a significant impact on
17 water reliability.

18 MR. SLATER: Can you explain?

19 MS. STAPLETON: Yes. Having a sole supply of imported
20 water coming from Metropolitan we have been subject to
21 cutbacks because of this lack of diversity. About,
22 somewhere between 75 and 95 percent of all water used in San
23 Diego County is from imported water supplies. And as a
24 result our lack of diversity has reduced our reliability.

25 MR. SLATER: Can you provide us with an example in

1 which this lack of reliability was actually experienced by
2 the Authority?

3 MS. STAPLETON: Yes, and that was in the early 1990s
4 during the six-year drought that impacted the State Water
5 Project. San Diego was given notice of a 50 percent cutback
6 in our imported water supply. And because of the miracle
7 March that cutback was reduced, but San Diego was impacted
8 by a 31 percent cutback in our water supply for that year.
9 And that is, again, because we had a sole supplier and had
10 no alternative supplies in which to pull from.

11 MR. SLATER: In front of you you have a document marked
12 San Diego Exhibit 29. Can you please take a look at that?

13 MS. STAPLETON: Yes.

14 MR. SLATER: Do you recognize it?

15 MS. STAPLETON: Yes.

16 MR. SLATER: Can you tell us what it is?

17 MS. STAPLETON: It is the Ordinance of San Diego County
18 Water Authority declaring the existence of a water shortage
19 emergency condition from 1991.

20 MR. SLATER: The impact of San Diego's adoption of that
21 ordinance was what?

22 MS. STAPLETON: A cutback of 50 percent of our imported
23 supplies.

24 MR. SLATER: Did San Diego's experience with this water
25 shortage cause it to adopt a new policy or pursue additional

1 sources?

2 MS. STAPLETON: Yes. It was really the most
3 significant event which led the Water Authority to looking
4 for two different changes. One is to seek an independent
5 supply and, secondly, to begin to diversify the water
6 supplies for San Diego County.

7 MR. SLATER: Is the IID/San Diego Water Transfer
8 Agreement an example of San Diego's pursuit for water
9 reliability?

10 MS. STAPLETON: Yes.

11 MR. SLATER: Were you involved in the negotiation of
12 the agreement with Imperial to secure the transfer
13 agreement?

14 MS. STAPLETON: Yes. I lead the negotiating team under
15 the direction of our board of directors.

16 MR. SLATER: So is it safe to say that you are familiar
17 with the terms of the agreement?

18 MS. STAPLETON: Yes, I am.

19 MR. SLATER: I believe this document has previously
20 been introduced into evidence as Imperial Exhibit Number 7,
21 otherwise known as the transfer agreement.

22 Ms. Stapleton, can you briefly summarize what you view
23 to be the essential terms of that contract?

24 MS. STAPLETON: Yes. It is for a very large and very
25 long in term water conservation and transfer program between

1 the Imperial Irrigation District and the San Diego County
2 Water Authority. Specifically, it is for between 130- and
3 200,000 acre-feet of water that will be conserved and
4 transferred from Imperial to San Diego. Its term is up to
5 75 years, and the price is beginning at approximately \$250.

6 MR. SLATER: What considerations did San Diego bring to
7 the table in the form of trying to negotiate a deal with its
8 partner, Imperial?

9 MS. STAPLETON: When we first began our discussions
10 with Imperial in 1995, we originally thought we were going
11 to look at something like the Palo Verde like agreement that
12 Metropolitan had just finished a pilot program in 1992
13 through 1994. And so we initially thought we would enter
14 into a similar agreement with Imperial. That actually
15 changed. We changed direction based upon Imperial
16 Irrigation District's needs and desires for an agreement
17 with San Diego, both in amount of water and the type of
18 conservation or the type of program that would result in the
19 water transfers.

20 We moved to an on-farm conservation program and as a
21 result we also had significant modifications in what the San
22 Diego County Water Authority originally was thinking about
23 pricing and terms.

24 MR. SLATER: And was the potential impact of the
25 transfer on the local economy considered in how the deal was

1 structured from San Diego's perspective?

2 MS. STAPLETON: Yes, absolutely, both in initial
3 discussions as well as in ultimately the agreement that was
4 reached. The cost that we are paying for, the per acre-foot
5 of water contained a variety of considerations. It was the
6 consideration of the cost of conservation, a farmer
7 incentive, the administrative costs, the loss of water sales
8 to IID as well as loss of power, and that financial
9 implication, also environmental mitigations issues and
10 communities development funding.

11 MR. SLATER: In front of you you have San Diego Exhibit
12 Number 14.

13 MS. STAPLETON: Yes.

14 MR. SLATER: Do you recognize that document?

15 MS. STAPLETON: I do.

16 MR. SLATER: Can you tell me what it is?

17 MS. STAPLETON: It is the exchange agreement between
18 Metropolitan Water District of Southern California and the
19 San Diego County Water Authority.

20 MR. SLATER: Are you generally familiar with its terms?

21 MS. STAPLETON: Yes, I am.

22 MR. SLATER: Can you briefly describe for us how it
23 works?

24 MS. STAPLETON: Yes. It is an agreement between the
25 two parties where San Diego will deliver to Metropolitan at

1 their intake on the Colorado River the amount of water that
2 we receive from Imperial Irrigation District. Metropolitan
3 will then exchange with San Diego at our takeoff point in
4 San Diego County a like amount of water that then will be
5 moved through our infrastructure system.

6 MR. SLATER: Is a fair characterization to say that the
7 exchange agreement is a transportation agreement whereby San
8 Diego will receive the water from Imperial?

9 MS. STAPLETON: Yes.

10 MR. SLATER: As a general manager of the Authority,
11 which is the largest water supply customer of Metropolitan,
12 do you have opinion as to whether Metropolitan will benefit
13 from the implementation of IID/San Diego water transfer
14 agreement?

15 MS. STAPLETON: Absolutely there will be a benefit to
16 Metropolitan, both in the infusion of 200,000 acre-feet of
17 imported water into the Met service area as well as the
18 benefit that Met will derive from the interim surplus
19 criteria which they are getting as a result of the
20 Quantification Settlement Agreement elements.

21 MR. SLATER: Do you have a similar opinion as to
22 whether the state of California will also benefit?

23 MS. STAPLETON: Yes. There is a direct benefit to the
24 State of California. And prior witnesses have gone into it
25 in detail. And that is that, again, California will benefit

1 not only from the movement on a voluntary basis from ag to
2 urban of an additional 200,000 acre-feet of water. But also
3 it will relieve the pressure on the Bay-Delta.

4 MR. SLATER: And can you give us a feel for how long in
5 terms of time and how much in terms of effort the San Diego
6 County Water Authority is expended in trying to consummate
7 this partnership?

8 MS. STAPLETON: We began this effort in 1995 with a MOU
9 with IID, and there have been continual negotiations or
10 effort by me personally as well as numerous members of my
11 staff and our board of directors since that time. It has
12 become, certainly, our number one priority for the Water
13 Authority to see this through fruition.

14 MR. SLATER: Given your 20 decades of experience --

15 MS. STAPLETON: Not 20 decades.

16 MR. SLATER: Twenty, strike decades.

17 Given your decades of experience in representing and
18 working with public agencies, how would you characterize
19 the context of these negotiations other than complex, other
20 than easy?

21 MS. STAPLETON: These have been extremely complex,
22 difficult, hard negotiations. My prior experience, I have
23 had extensive experience in development agreements and in
24 redevelopment and so forth and have been in many
25 negotiations in my career. And I can say without hesitation

1 that this has been the most complex, difficult, yet
2 necessary negotiations I believe for the agencies involved
3 as well as the state of California.

4 MR. SLATER: And, again, in your capacity as General
5 Manager for the Authority and based upon the facts and your
6 experience in this case, what would be the impact on San
7 Diego County and the Authority if this IID/San Diego
8 transfer is not consummated?

9 MS. STAPLETON: Obviously, from the Authority's
10 standpoint is we would lose the potential for an
11 independent, highly reliable and diverse supply into San
12 Diego County. It would mean that our portfolio would be
13 less reliable for our service area. And it would require us
14 to basically go back to the drawing boards to reevaluate the
15 situation and to move forward again.

16 MR. SLATER: Do you have any view, again, as the
17 impacts on Southern California and in particular the
18 Metropolitan Water District?

19 MS. STAPLETON: Yes. Metropolitan has the potential
20 and is in jeopardy of losing up to 700,000 acre-feet of
21 surplus water for the next 14 years now through the interim
22 surplus criteria. Also, there is true potential they would
23 lose the 200,000 acre-feet of water that is coming in from
24 IID to San Diego. And in reality it would have an impact
25 upon the delicate balance that has been struck through the

1 Quantification Settlement Agreement for Metropolitan as well
2 as San Diego.

3 MR. SLATER: Again, not to be obvious here, but as
4 Metropolitan's largest customer, San Diego would again
5 suffer as well, correct?

6 MS. STAPLETON: Absolutely.

7 MR. SLATER: Same question for California. In your
8 view based upon your experience, your knowledge of
9 California water, what impacts on California if this
10 transfer is not brought to fruition?

11 MS. STAPLETON: I believe it will put pressure in
12 Central and Northern California. Southern California, the
13 coastal plain, will have to really seek and maximize the
14 supplies and the entitlements that we have in the State
15 Water Project as well as begin seeking replacement water if
16 we are unsuccessful on the Colorado River.

17 Can I add one more thing?

18 MR. SLATER: Sure.

19 MS. STAPLETON: That is I do think if we are
20 unsuccessful in the execution of the Quantification
21 Settlement Agreement, that we will break out in a series of
22 lawsuits, both internally to California as well as with
23 other basin states, and that does have a direct impact on
24 the state as well.

25 MR. SLATER: Your fair characterization is gridlock or

1 worse?

2 MS. STAPLETON: No, it is more food fight and then
3 gridlock.

4 MR. SLATER: I'll defer.

5 The Board issued a notice dated February 2nd of --
6 actually February 5th, 2002, in identifying key issues. Key
7 issue No. 3 inquires as to whether the Board ought to make
8 certain special findings and/or conclusions.

9 Approach the witness and show her the notice.

10 Are those findings familiar to you?

11 MS. STAPLETON: Yes, they are.

12 MR. SLATER: Can you tell us where you have seen them
13 before?

14 MS. STAPLETON: Yes, in two places. One is they are in
15 the agreement between San Diego and Imperial Irrigation
16 District. And, secondly, if I recall correctly, they are
17 part of the dismissal agreement with Metropolitan and
18 Coachella.

19 MR. SLATER: And in your view is it important for the
20 success of the transfer partnership that the Board adopt
21 these special findings?

22 MS. STAPLETON: Yes. These are part and parcel of that
23 delicate balance that I spoke of before among the four
24 agencies.

25 MR. SLATER: Only two more questions, Ms. Stapleton.

1 In your capacity as General Manager of the Authority
2 and based upon your knowledge of all the facts and
3 circumstances in this case acquired over the years that you
4 have been involved in the negotiations and working for the
5 Authority, do you have an opinion as to whether the State
6 Board's approval of the transfer agreement and QSA is
7 essential for the well-being of the San Diego County Water
8 Authority, Metropolitan and the State of California?

9 MS. STAPLETON: I can be -- I can think of no other
10 action that is before this Board or has been before this
11 Board that can have such far reaching implications than this
12 water transfer and ultimately the QSA and the Colorado River
13 4.4 Plan.

14 MR. SLATER: Again, to emphasize, if these findings are
15 necessary and important for a partner in the QSA and a
16 partner with San Diego in the transfer agreement, it is also
17 important that these findings be adopted?

18 MS. STAPLETON: Yes, sir.

19 MR. SLATER: Thank you.

20 Mr. Weinberg.

21 MR. WEINBERG: Yes, Mr. Slater, I have not been sworn
22 in.

23 (Oath administered by Chairman Baggett.)

24 MR. SLATER: Mr. Weinberg, you have a document in front
25 of you. I believe San Diego Exhibit 2 and 2A?

1 MR. WEINBERG: Yes, I do.

2 MR. SLATER: Do you recognize the document?

3 MR. WEINBERG: It is my testimony before this Board.

4 MR. SLATER: Do you wish to make any changes?

5 MR. WEINBERG: No, I do not.

6 MR. SLATER: Is it true and correct, then?

7 MR. WEINBERG: Yes, it is.

8 MR. SLATER: Could you please tell us your professional
9 title and position?

10 MR. WEINBERG: I am the Director of Water Resources for
11 the San Diego County Water Authority.

12 MR. SLATER: And can you describe your background and
13 qualifications with respect to your testimony?

14 MR. WEINBERG: I have a Bachelor of Science degree and
15 a Master of Public Administration. And I have been with the
16 Water Authority since September of 1991. I have been there
17 in a capacity dealing with water supply planning and demand
18 planning and since September of 1997 I have been Director of
19 Water Resources.

20 I have also been the principal author of our 1997 Water
21 Resources Plan and I was intimately involved in the
22 development of the first water resources plan in 1993 and I
23 oversaw the development of our latest urban water management
24 plan for the year 2000.

25 MR. SLATER: So the Urban Water Management Plan was

1 prepared generally with your input and direction?

2 MR. WEINBERG: Yes, under my direction in my
3 department.

4 MR. SLATER: I believe you have in front of you a
5 document identified as San Diego Exhibit No. 6.

6 Can you please review that.

7 MR. WEINBERG: Yes, I do. That is the latest update
8 of our 2000 Urban Water Management Plan.

9 MR. SLATER: That is the plan that you directed in
10 preparation?

11 MR. WEINBERG: Yes, it is.

12 MR. SLATER: What about San Diego Exhibit 8, which is
13 also in front of you?

14 MR. WEINBERG: I do not seem to have Exhibit 8.

15 MR. SLATER: Sorry, it is 9.

16 MR. WEINBERG: I do have Exhibit 9. This is the 1997
17 Water Resources Plan.

18 MR. SLATER: That is the plan that you were the
19 principal author of?

20 MR. WEINBERG: I was principal author of this plan.

21 MR. SLATER: Can you please tell us what is the total
22 volume of water that is provided within the San Diego County
23 Water Authority service territory?

24 MR. WEINBERG: Total consumptive water use has been
25 running at approximately 600- to 700,000 acre-feet the last

1 couple years. That is total use. That includes local
2 supplies as well as imported water that the Authority
3 delivers to its 23 member agencies.

4 MR. SLATER: Among the 23 member agencies, can you
5 briefly describe what the mix of supply is?

6 MR. WEINBERG: It is a varied mix. Some agencies have
7 a lot of local supplies. Sometimes they can go off of the
8 imported system for three years at a time and that is
9 dependent on surface water runoff.

10 Other agencies are a hundred percent dependent on
11 imported water. There are those that fall in between. For
12 the most part, we are dependent on imported water that
13 ranges from 75 percent in what would be a wet year, when we
14 have a lot of surface water runoff, to during the drought,
15 in dry weather conditions we have now, it is 90 to 95
16 percent dependent on imported water.

17 MR. SLATER: Can you tell us in your experience what
18 factors tend to affect water use in San Diego County?

19 MR. WEINBERG: There is a variety of factors, the
20 weather as I stated. The local economic conditions have an
21 impact on it. The price of water has an impact on it. For
22 example, our agricultural users who account for about 15
23 percent of water use in the county need upwards of a hundred
24 thousand acre-feet. Based on the highest water rights we
25 believe in the state if not the nation, in the fact they are

1 paying somewhere between 450 and maybe more than \$600 a acre
2 foot, requires them to be pretty water efficient. So that
3 has a definite impact on them.

4 MR. SLATER: Can you generally describe what efforts
5 San Diego County Water Authority has undertaken to control
6 demand?

7 MR. WEINBERG: We have taken on quite a few. And
8 really comes out of lessons learned from the last drought
9 where we saw our dependence on two sources of imported water
10 and our board and our organization came out with a real
11 commitment to diversify our supplies. The first commitment
12 was to implement conservation, was to control demand and
13 manage that demand. And we have been an aggressive
14 implementor of water conservation. We have been at the
15 forefront of development of state policy on water
16 conservation.

17 One of our staffers was a driving force in the
18 development of the Urban Memorandum of Understanding for
19 Water Conservation. We've been implementing the BMPs
20 vigorously since the drought. The last 11 years we've saved
21 cumulative 170,000 acre-feet as a result of implementing
22 water conservation BMPs. These are installation of ultra
23 low flow toilets, shower heads, low flow shower heads.
24 We've been doing that on both the residential and commercial
25 side. We do residential water surveys. We do large

1 landscape surveys for condominium-types of operations, golf
2 courses, those things. We work with our agriculture
3 community as well to help them be even more water efficient
4 by installing things like micro sprayers and low flow
5 emitters, those types of things.

6 So we have been very successful in that endeavor. The
7 Water Authority as an agency expends upwards of a million
8 dollars a year. We are fortunate to get funds from
9 Metropolitan Water District, sometimes from the federal
10 government, sometimes from the state. And that results in a
11 regional commitment of \$5,000,000 or more annually to water
12 conservation and water use efficiency.

13 MR. SLATER: Is there something special about a high
14 efficiency clothes washer that you've been pursuing?

15 MR. WEINBERG: That's been our latest endeavor. We
16 have installed hundreds of thousands of ultra low flush
17 toilets. At some point and with the state legislation
18 requiring that ultra low flush toilets are in new
19 construction, we are at saturation point. So we are looking
20 for new methods of water conservation. And one of them is
21 to go from the top loading washers to the front loading
22 washers. And that saves about 40 percent in water and 60
23 percent in energy.

24 And it was considered what is called a potential best
25 management practice. We've put it into place. We designed

1 a program. We got it out there for both residences and
2 commercial/industrial users. It was very successful. And
3 this year the governor recognized our program with his
4 environmental award this past year for the high efficiency
5 washer program.

6 MR. SLATER: Mr. Weinberg, for a frame of reference, do
7 you happen to know what the agricultural efficiency is in
8 San Diego County?

9 MR. WEINBERG: One way that we've measured how
10 efficient our agricultural water uses are was in the
11 development of agricultural water plan this last year that
12 was approved by your Board. The calculation there took our
13 different crops, we have row crops and grove crops, and
14 calculated according to industry standards how much water
15 they should be using. And then based on that industry
16 standard, we look at what they are actually using and we
17 found that they were about 28 percent below that industry
18 standard when you calculate what their irrigation rate
19 should be, if you are doing it kind of by the textbook.

20 MR. SLATER: Mr. Weinberg, in front of you you have a
21 document identified as San Diego Exhibit 35. Can you peruse
22 that for a second?

23 MR. WEINBERG: I do have San Diego Exhibit 35.

24 MR. SLATER: Can you tell us what that is?

25 MR. WEINBERG: This is the Memorandum of Understanding

1 regarding urban water conservation in California.

2 MR. SLATER: That is the memorandum that you were
3 previously speaking to?

4 MR. WEINBERG: Yes, this was the memorandum I was
5 referring to.

6 MR. SLATER: Can I call your attention -- first, has
7 San Diego executed that memorandum?

8 MR. WEINBERG: We are signatory as is many of our
9 member agencies.

10 MR. SLATER: What is the purpose of the MOU?

11 MR. WEINBERG: MOU is really a commitment on the part
12 of the urban water agencies to pursue and implement these
13 best management practices. Some of them have as much detail
14 as exactly what kind of fixtures to install, to education
15 and public information and hiring a water conservation
16 coordinator.

17 The Water Authority as a wholesale agency is not
18 required to implement all those BMPs, but we have taken it
19 on ourselves to pursue almost all of them. I think
20 everything that has been required to be implemented now we
21 have done, and we have implemented more than what should be
22 implemented at this point in time.

23 MR. SLATER: To make that point, could I call your
24 attention to Exhibit 35, Table 4.1. I think I have marked
25 that.

1 MR. WEINBERG: Is that also on the screen?

2 MR. SLATER: Yes, that is.

3 Thank you.

4 MR. WEINBERG: Yes, I can see it now. I am here.

5 MR. SLATER: So has San Diego, in fact, implemented all
6 of the measures identified?

7 MR. WEINBERG: All of these are listed BMPs. We are
8 implementing all these measures.

9 MR. SLATER: And in your opinion, to what extent have
10 those measures been successful? In other words, if I can
11 sharpen it for you, what are the quantity of savings that
12 the Authority estimates associated with these measures?

13 MR. WEINBERG: Cumulatively since the drought, we have
14 saved about 170,000 acre-feet. As we look out into the
15 future in our Urban Water Management Plan, we are relying
16 heavily on conservation. It is one of our key local sources
17 of water supply. For a demand of 813,000 acre-feet in 2020,
18 that would have been 93,000 acre-feet more if not for our
19 pursuit of conservation.

20 MR. SLATER: For purposes of clarification, is that an
21 annual savings or cumulative savings over time?

22 MR. WEINBERG: That would be the annual savings. We
23 expect to save annually 93,000 acre-feet a year as a result
24 of BMP implementation.

25 MR. SLATER: You mentioned the governor's environmental

1 award this year. In the past has San Diego been recognized
2 or won other awards regarding conservation efforts?

3 MR. WEINBERG: Yes, we have. One of our staff people
4 won -- Bill Jacoby won an award from the California Urban
5 Water Conservation Council for overall statewide
6 contributions to water conservation, and he was the one that
7 -- one of the architects of the MOU.

8 MR. SLATER: To what extent does San Diego expect to
9 continue to reduce water demands into the future?

10 MR. WEINBERG: We expect to reduce demands by about 12
11 percent as we go into the future.

12 MR. SLATER: San Diego takes into account its water
13 conservation measures when making future water supply
14 forecasts?

15 MR. WEINBERG: We always have. Whenever we forecast
16 demand, one of the first things we do is we calculate what
17 we believe the water conservation savings will be. And that
18 is our net our -- our demand is net of those savings. It
19 always take that into account.

20 MR. SLATER: In your Urban Water Management Plan have
21 you prepared a water supply forecast?

22 MR. WEINBERG: Yes, we have. It was referred a little
23 bit, a couple questions ago, to the 813,000 thousand
24 acre-foot forecast which includes a savings, that is a net
25 forecast. Anticipated savings of 93,000 acre-feet a year by

1 2020.

2 MR. SLATER: Again for clarification, that is the table
3 2.2 in the urban plan?

4 MR. WEINBERG: Yes, it is.

5 MR. SLATER: On a go forward basis how does the
6 Authority expect to satisfy its future water supply demands?

7 MR. WEINBERG: As we look out into the future, and that
8 is covered in the Urban Water Management Plan, we are
9 looking at continued implementation of supply diversity.
10 When we first came out in '93 we began our diversification
11 with emphasis on water conservation, emphasis on local
12 supplies, reclamation, groundwater recovery.

13 In '97 we took another look at that and started to look
14 at core transfers as we had concerns about the reliability
15 of our imported sources on not just dry year basis, on
16 normal year basis. As we look out to the Urban Water
17 Management Plan for 2000, we consider a continuance of that
18 diversification. We are looking at aggressive pursuit of
19 conservation, continued implementation of water recycling,
20 upwards of 50,000 acre-feet a year by 2020, continued
21 pursuit of groundwater development in our county. Again,
22 close to 50,000 acre-feet.

23 And we are even considering seawater desalination, for
24 purposes of the Urban Water Management Plan we felt that at
25 that time, the assumption that there would be 25,000

1 acre-feet by 2020 was reasonable, and we are continuing to
2 look at that to see if there is more potential. As we go
3 out into the future, we are looking at everything, including
4 the IID transfer as being an integral part of what that
5 water supply mix is going to be in the future.

6 MR. SLATER: In your mind, without the IID water supply?

7 MR. WEINBERG: Our reliability would be significantly
8 affected and our mix would not work.

9 MR. SLATER: Final two questions.

10 In your capacity as the Director of Water Resources for
11 the Authority and based upon all your knowledge, facts and
12 circumstances that you come in contact with on a daily
13 basis, do you have an opinion as to whether San Diego has
14 successfully implemented a comprehensive water demand
15 strategy?

16 MR. WEINBERG: Yes, I do. I think we have been proven
17 out by time that by diversing our supplies is the answer,
18 and it is all of our supplies, including the imported
19 portions.

20 MR. SLATER: And do you have an opinion, based on your
21 professional capacity, facts and circumstances, all your
22 knowledge that you bring to bear, as to whether the IID/San
23 Diego deal provides an effective and beneficial water supply
24 for San Diego?

25 MR. WEINBERG: It provides a critical water supply

1 alternative and our reliability is in large part based on
2 it.

3 MR. SLATER: Thank you both.

4 I will offer them both for cross.

5 CHAIRMAN BAGGETT: Thank you.

6 Imperial Irrigation District, Mr. Osias.

7 MR. OSIAS: Imperial Irrigation District has no
8 questions.

9 CHAIRMAN BAGGETT: Colorado Tribes.

10 UNIDENTIFIED AUDIENCE MEMBER: No questions.

11 CHAIRMAN BAGGETT: Defenders of wildlife.

12 ----oOo----

13 CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

14 BY DEFENDERS OF WILDLIFE

15 BY MR. FLETCHER

16 MR. FLETCHER: Good afternoon, Ms. Stapleton.

17 MS. STAPLETON: Good afternoon.

18 MR. FLETCHER: In your direct testimony you stated that
19 the price established in the transfer agreement between
20 Imperial Irrigation District and the Authority was based in
21 part on substantial environmental mitigation?

22 MS. STAPLETON: Correct.

23 MR. FLETCHER: Are you familiar about, and I think you
24 are, IID Exhibit 7, the transfer agreement?

25 MS. STAPLETON: Yes, I am.

1 MR. FLETCHER: In Section 1.1, Sub (b)(k), which is on
2 Page 8, could you just read me that or I can read it for
3 you? It is a definition of IID's environmental cost
4 ceiling. Is that definition intended to cap for purposes of
5 agreement IID's potential initial environmental cost?

6 MS. STAPLETON: Yes.

7 MR. FLETCHER: Under Section 8.1, Subdivision (b)(i),
8 which is on Pages 44 and 45, that paragraph establishes as a
9 condition of IID's obligation under the agreement that IID's
10 initial environmental cost will not exceed \$15,000,000; is
11 that right?

12 MS. STAPLETON: Correct.

13 MR. FLETCHER: Was that portion of the price negotiated
14 for the agreement, that portion of the price that dealt with
15 environmental, potential environmental mitigation issues,
16 established with that figure in mind?

17 MS. STAPLETON: Yes, that was part of the package of
18 the total costs.

19 MR. FLETCHER: Have you participated in negotiations
20 with the Department of Fish and Game regarding potential
21 mitigation measures for impacts to species listed under the
22 California Endangered Species Act?

23 MS. STAPLETON: Yes, I have.

24 MR. FLETCHER: What to your knowledge is the Department
25 of Fish and Game's most recent estimate of what those costs

1 may be?

2 MR. OSIAS: Mr. Chairman, I have no objection to the
3 content. The question is really should this be in Phase II,
4 where we are going to do impacts on fish and wildlife. We
5 are getting into Fish and Game estimate for mitigation.

6 CHAIRMAN BAGGETT: I think that it is an appropriate
7 question for the General Manager. Is she available in Phase
8 II?

9 MR. SLATER: Ms. Stapleton is advising me she is
10 willing to come back. We don't plan to independently offer
11 her on any substantive points.

12 MR. FLETCHER: This is a fairly short line of
13 questioning, actually goes to how the price was calculated.

14 CHAIRMAN BAGGETT: Continue. I think just for
15 efficiency. She is here. Just a few questions.

16 MR. SLATER: We have no objection.

17 MR. FLETCHER: So to repeat, what to your knowledge is
18 the Department of Fish and Game's most recent estimates of
19 those costs?

20 MS. STAPLETON: The last meeting that I participated
21 in, it was a little over a hundred million dollars.

22 MR. FLETCHER: Those costs are for compliance with the
23 California Endangered Species Act alone, are they not? They
24 do not take account of other environmental costs, potentials
25 costs, such as mitigation for air quality, other kind of

1 impacts?

2 MS. STAPLETON: My understanding is those costs related
3 directly to the Salton Sea and mitigation for just the
4 Salton Sea issues.

5 MR. FLETCHER: That is the end of my questioning.

6 Thank you.

7 CHAIRMAN BAGGETT: Thank you.

8 County of Imperial.

9 MR. ROSSMANN: Yes, sir.

10 ----oOo----

11 CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

12 BY COUNTY OF IMPERIAL

13 BY MR. ROSSMANN

14 MR. ROSSMANN: Good afternoon.

15 MS. STAPLETON: Good afternoon, sir.

16 MR. ROSSMANN: In his opening statement the chair of
17 our board on Monday pointed out that the Imperial
18 Irrigation District is a parent of the County of Imperial.
19 I was reading the county's history last night and I realized
20 that we are a parent of San Diego County.

21 MS. STAPLETON: Yes.

22 MR. ROSSMANN: It is our hope that just as we are proud
23 of our offspring, you will be proud of yours.

24 I also saw an ad on the bus board down on L Street last
25 night from San Diego. You can't get sunshine from an act of

1 Congress.

2 I guess the question here is, in San Diego can you get
3 water from an act of Congress. That was an ad for the San
4 Diego Visitors Bureau.

5 Maybe I'd ask Ms. Hastings to put Exhibit 5.1 or Table
6 5.1 back up. I don't know if that is possible. While
7 waiting for that, Ms. Stapleton, let me ask you this: What
8 is your calculation of the loss of firm supplies from
9 Metropolitan that will happen as a result of California
10 being cut back to 4.4 million acre-feet?

11 MS. STAPLETON: As indicated by a prior witness, Dennis
12 Underwood, I believe his statement was accurate, that if you
13 assume that Metropolitan would be cut back the 700,000
14 acre-feet of surplus water that now fills half of their
15 aqueduct, then that is approximately a 30 percent cut in
16 imported water supplies. And if applied uniformly among the
17 Met member agencies, San Diego would receive a 30 percent
18 cut which is just under -- just over 180,000 acre-feet of
19 water.

20 MR. ROSSMANN: Multiplying 730 by 30, I am getting
21 210-. In round figures somewhere in the 200,000 acre-feet
22 neighborhood?

23 MS. STAPLETON: Correct.

24 MR. ROSSMANN: And looks like from Table 5.1 that
25 you're relying on 303,000 from Metropolitan for your

1 long-term planning?

2 MS. STAPLETON: That is the preferential rights that we
3 have at Metropolitan. And then if you notice the next line,
4 other competitive imported sources, that could include in
5 that amount a portion or all of that could be covered
6 through Metropolitan depending on its competitiveness.

7 MR. ROSSMANN: You say you have to go back to the
8 drawing board if this transfer doesn't take place?

9 MS. STAPLETON: I think California would have to go
10 back to the drawing board if this doesn't take place.

11 MR. ROSSMANN: Let's just call on you this afternoon
12 on behalf of San Diego.

13 What are some of the options that San Diego has looked
14 at on that drawing board in the event that this transfer is
15 not approved or is, in fact, not approved by either this
16 board or the Imperial District?

17 MS. STAPLETON: It would be looking at other sources of
18 imported supplies through a transfer program, as well as
19 desalination would be another option that would be looked at
20 for the long-term.

21 MR. ROSSMANN: Have you made any estimates of the
22 desalination potential you are talking about or your
23 colleague, 25,000 acre-feet by the year 2020? Have you made
24 any estimates of what your maximum potential would be over
25 that time frame if you were forced to that alternative?

1 MS. STAPLETON: Up through 2020 we believe that
2 probably a 50,000 acre-foot may be able to be realized by
3 2020.

4 MR. ROSSMANN: Did you consider the alternative in
5 formulating this transfer of actually reducing the transfer
6 in the later years to wean off of it by relying to a higher
7 extent on new technology such as desalination?

8 MS. STAPLETON: I think we are looking at desalination
9 for additional supplies for potential growth within our
10 community. You have to understand is we face an immediate
11 concern related to our existing supplies. And that the
12 200,000 acre-feet is for two replacement supplies, of water
13 on the Colorado River which will no longer be available to
14 the coastal plain of Southern California.

15 MR. ROSSMANN: If you were to pursue desalination that
16 would be to accommodate future growth?

17 MS. STAPLETON: Yes.

18 MR. ROSSMANN: I am looking at your testimony at Page
19 9, and I will read the sentence, although you may want to
20 get it in front of you to be more comfortable, Line 16
21 through 19. And it reads:

22 The 200,000 acre-feet we now anticipate being
23 able to purchase from the transfer, water
24 transfer agreement, will replace a large
25 portion of the supplies MWD presently

1 receives on the river and will significantly
2 reduce the risk of future shortages.

3 (Reading.)

4 MS. STAPLETON: Correct.

5 MR. ROSSMANN: That sentence doesn't say anything about
6 accommodating future growth?

7 MS. STAPLETON: Correct.

8 MR. ROSSMANN: You do not see that as part of the
9 purposes of this transfer?

10 MS. STAPLETON: No, this is replacement supplies to
11 supplies that we are collectively losing in the Metropolitan
12 service area due to the 4.4 requirement.

13 MR. ROSSMANN: Do you anticipate in the next 20 years
14 that your use of agricultural water will increase in the San
15 Diego Water Authority?

16 MS. STAPLETON: No. We do not anticipate an increase
17 of agricultural usage in our service area.

18 MR. ROSSMANN: It will remain constant or will it
19 decline?

20 MS. STAPLETON: I believe Ken is probably better suited
21 to address that.

22 MR. ROSSMANN: That would be fine, if that is fine with
23 the Chair.

24 MR. WEINBERG: Yes, it would. It decreases over time
25 due to land conversions.

1 MR. ROSSMANN: Let me pursue that line of questioning.
2 As I did the mathematics, your agricultural use is presently
3 approximately a hundred thousand acre-feet a year?

4 MR. WEINBERG: Yes, that is correct.

5 MR. ROSSMANN: When you suffered cutbacks in 1991 along
6 with the rest of us, did you cut back a proportion to your
7 all users or did you differentiate between the urban and
8 agricultural sector?

9 MR. WEINBERG: We cut back across the Board.

10 MR. ROSSMANN: Ms. Stapleton, I am going to show you
11 the second amendment to the petition for approval of
12 long-term transfer which was filed in this Board on December
13 11th, 2001. If you have a copy, fine, but I will be happy
14 to give you my copy.

15 First, I would ask you to verify that that is your
16 attorney's signature on that pleading.

17 MS. STAPLETON: I don't know Scott's signature. I
18 presume it is his signature.

19 MR. ROSSMANN: You believe that this was submitted
20 under your authority by your attorney?

21 MS. STAPLETON: Yes, sir.

22 MR. ROSSMANN: Could you then turn to the last page
23 which is the State Water Board's form. And under that it
24 talks about the applicants, of which I believe you are one.
25 You have to state the purposes for the transfer.

1 Would you be kind enough to read what the stated
2 purposes of transfer are?

3 MS. STAPLETON: The purpose of use is irrigation and
4 domestic, and the proposed is irrigation, domestic and
5 municipal.

6 MR. ROSSMANN: And continuing on?

7 MS. STAPLETON: Transfer of conserved water to
8 Authority and acquisition of conserved water by Coachella
9 and Met. Authority pays for conservation efforts for
10 conserved water transferred to it. Coachella and Met pay
11 for conserved water acquired by each. Authority needs
12 independent, reliable, alternative long-term supply for
13 drought protection and to accommodate anticipated growth in
14 domestic, municipal and agricultural uses in San Diego.
15 Coachella and Met require additional water to firm up
16 reliability and supply for existing users.

17 MR. ROSSMANN: So it is my understanding that your
18 application stated that this transfer was needed to
19 accommodate increased agricultural use in San Diego County
20 and future growth there.

21 MS. STAPLETON: We do not anticipate increased
22 agricultural growth in San Diego County.

23 MR. ROSSMANN: Thank you.

24 How about future growth?

25 MS. STAPLETON: Yes, we do anticipate future growth in

1 our region.

2 MR. ROSSMANN: This transfer is intended to, pursuant
3 to that application, to accommodate that future growth?

4 MS. STAPLETON: The water coming from Imperial we
5 believe is replacement water. The Authority does need an
6 independent reliable alternative, long-term supply for
7 ultimately the growth that we will experience in the next
8 decades, yes.

9 MR. ROSSMANN: Thank you.

10 Why don't you keep that in case someone else or your
11 attorney wants to come back to that.

12 You pointed to Exhibit 29 in your direct testimony.
13 Could I ask you to have that one in front of you and
14 particularly turn to Page 8 of that exhibit.

15 CHAIRMAN BAGGETT: Exhibit?

16 MR. ROSSMANN: Exhibit 29, your Honor, Page 8.

17 I don't know if Ms. Hastings has that instant
18 capability to put that up.

19 MS. HASTINGS: Sorry. No, I don't have.

20 MR. ROSSMANN: I don't have that in front of me, but
21 are my floats accurate, that Paragraph 3 provide that
22 sprinkler irrigation is prohibited for all by agricultural
23 use, pursuant to that emergency cutback program?

24 MS. STAPLETON: Yes. It says sprinkler systems may
25 only be used for agricultural production, water activity --

1 active public park and school ground areas, et cetera.

2 MR. ROSSMANN: Please look down on Paragraph 4.
3 Irrigation between 9:00 a.m. and 4:00 p.m. is prohibited
4 throughout your service area; is that correct?

5 MS. STAPLETON: Yes, with the exception of micro
6 irrigation system and equipment. Or agricultural production
7 or when using reclaimed water, gray water or private well
8 water.

9 MR. ROSSMANN: So I understand it, the nine to four
10 prohibition against irrigation during the daytime did not
11 apply to the agricultural sector?

12 MS. STAPLETON: Yes.

13 MR. ROSSMANN: You mentioned the Palo Verde-type
14 agreement as something that you and Imperial had
15 contemplated, or more accurately that your agency had
16 completed?

17 MS. STAPLETON: Correct.

18 MR. ROSSMANN: It was your agency that had entertained
19 that idea?

20 MS. STAPLETON: Yes.

21 MR. ROSSMANN: Would you explain when you said that was
22 -- would you explain the difference between that concept and
23 what was actually consummated with Imperial?

24 MS. STAPLETON: Yes. The Palo Verde or PVID like deal
25 was based on a fallowing program and crop rotation or land

1 management program, where crops -- ag land would be taken
2 out of production for a period of time or rotated through a
3 landownership, and then that water would be conserved and
4 moved to San Diego. That is different than what was
5 consummated, which is predominantly an on-farm conservation
6 program where specific actions and projects are taken
7 on-farm to conserve the water and move that water to San
8 Diego.

9 MR. ROSSMANN: Thank you.

10 Is the San Diego County Water Authority a signatory to
11 the QSA?

12 MS. STAPLETON: No, we are not.

13 MR. ROSSMANN: But you are a co-lead agency on the
14 environmental impact report; is that correct?

15 MS. STAPLETON: Yes, we are.

16 MR. ROSSMANN: Could you explain that?

17 MS. STAPLETON: San Diego County Water Authority is not
18 a contractor with the Bureau of Reclamation and the
19 Department of the Interior. And as a result the Secretary
20 of the Interior, although we were active in the negotiations
21 on the QSA, felt it was more appropriate that we not be
22 formal signatories to the QSA.

23 San Diego in deference to the desire by the feds agreed
24 to that provision.

25 MR. ROSSMANN: You, when I say you I mean your

1 Authority, have no approval authority, small a, with respect
2 to the QSA?

3 MS. STAPLETON: If you recall, the QSA is a master
4 document with up to 40 plus other legal documents as
5 exhibits or attachments. The Water Authority is a signatory
6 to many of those other documents which make up this master
7 QSA.

8 MR. ROSSMANN: Thank you. That helps explain it.

9 Let me ask you the familiar question by now: Have you
10 seen the EPA comment letter on the QSA/EIR?

11 MS. STAPLETON: No, I have not.

12 MR. ROSSMANN: Seems to be the alligator in the bathtub
13 that nobody wants to read, or the peas on the plate. My
14 five-year-olds are very good at that, so children teach you
15 a lot about these things.

16 Let's come back -- I'm almost done -- to the exchange
17 agreement, Exhibit 14. I think on your direct testimony you
18 answered most of the questions I was prepared to ask, and I
19 appreciate that. I just want to verify that, turning to
20 Page 15 of that agreement, that the exchange water in
21 Metropolitan's aqueduct is considered local water?

22 MS. STAPLETON: Yes.

23 MR. ROSSMANN: By that I mean it is considered San
24 Diego's water and not commingled with Metropolitan's supply?

25 MS. STAPLETON: Yes. That the water we receive from

1 the Metropolitan in the exchange agreement would be deemed
2 local water under a variety of activities by Metropolitan.

3 MR. ROSSMANN: Is it your understanding that this
4 agreement was entered into so that Metropolitan would meet
5 their obligations under state law to make their aqueduct
6 available for the transmission of your water?

7 MS. STAPLETON: This specific provision related to the
8 need and desire and goal of the Water Authority to assure we
9 had a diversified supply and that the Imperial Irrigation
10 District water was not blended into the supplies that
11 Metropolitan then divided up among its member agencies.

12 MR. ROSSMANN: Am I correct in characterizing this
13 essentially as a wheeling agreement?

14 MS. STAPLETON: Yes, it is a transportation agreement.
15 It in essence provides transportation for the Imperial
16 Irrigation District water. It is through an exchange that
17 we were able to accomplish it.

18 MR. ROSSMANN: To your knowledge, this technique was
19 not used to avoid the findings required by Water Code
20 Section 1810.

21 MS. STAPLETON: No, it was not.

22 MR. ROSSMANN: Thank you.

23 You testified that it was very important that the State
24 Board make the first findings specified at Page 6 of the
25 hearing order. Let me anticipate your concern. If you have

1 no independent knowledge of this, I am not asking for it.

2 Do you have an independent knowledge of why it is
3 important for the State Board to make this finding aside
4 from the fact that your partners, if you will, have asked
5 that this finding be made?

6 MS. STAPLETON: I believe it is part of the need for
7 long-term certainty related to the water transfer and
8 ultimately the Quantification Settlement Agreement.

9 MR. ROSSMANN: Let's make sure we are talking about the
10 same finding. Which finding -- in making your answer, Ms.
11 Stapleton, to which finding were you referring?

12 MS. STAPLETON: Three.

13 MR. ROSSMANN: Maybe I am on the wrong page. Because
14 I'm on Page 6 and I see a lot of findings here.

15 MR. SLATER: Counsel, the findings are lettered.

16 MR. ROSSMANN: Yes. And so I am asking is Ms.
17 Stapleton referring to every one of those finds or to a
18 specific finding.

19 MS. STAPLETON: I am referring to all of those findings
20 that are listed by letter.

21 MR. ROSSMANN: I am only asking you, I'm sorry, about
22 Subdivision A. Do you have an independent understanding of
23 why you testified it is important that that finding be made
24 by the Board with respect to precedential affect?

25 MS. STAPLETON: Because of -- my understanding is it's

1 the nonprecedential that was important to ensure again that
2 this was -- had lasting power as both the water transfer and
3 that it did not impact potentially other transfers that may
4 be under consideration.

5 MR. ROSSMANN: Other transfers on the Colorado River or
6 other transfers throughout the state?

7 MS. STAPLETON: Other transfers in general.

8 MR. ROSSMANN: In general, okay.

9 Final question. You testified, I believe in response
10 to Mr. Fletcher, about the \$15,000,000 mitigation fund.
11 Does that fund include any compensation for economic impacts
12 in Imperial County but outside the corporate structure of
13 the Imperial Irrigation District?

14 MS. STAPLETON: Could you clarify your question?

15 MR. ROSSMANN: Yes. Does the \$15,000,000
16 environmental fund that you previously testified about
17 include compensation, for example, to Imperial County to
18 mitigate any economic impacts that might befall the county
19 as a consequence of this transfer?

20 MS. STAPLETON: My understanding that the 15,000,000
21 relates to environmental mitigation, and I do not believe
22 that that economic impact issue would fall within that
23 15,000,000.

24 MR. ROSSMANN: So if there were to be such
25 compensation, it would not be subject to the \$15,000,000

1 limitation?

2 MS. STAPLETON: That is my understanding.

3 MR. ROSSMANN: Mr. Chairman and witnesses, thank you
4 very much.

5 CHAIRMAN BAGGETT: Thank you.

6 Farm Bureau.

7 MR. RODEGERDTS: Nothing.

8 CHAIRMAN BAGGETT: Mr. Du Bois.

9 ---oOo---

10 CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

11 BY MR. DU BOIS

12 MR. DU BOIS: I would like to ask my first question of
13 Dr. Weinberg.

14 MR. WEINBERG: Just Mr., no Dr. Never got that far.

15 CHAIRMAN BAGGETT: Are you Phi Beta Kappa?

16 MR. WEINBERG: Not even that.

17 MR. DU BOIS: Page 15 of your testimony, beginning on
18 Line 7.

19 MR. WEINBERG: Did you say Page 15?

20 MR. DU BOIS: Yes, beginning on Line 7.

21 MR. WEINBERG: Yes.

22 MR. DU BOIS: You make a statement there that brackish
23 groundwater conditions caused by seawater intrusion and
24 historic overirrigation of agricultural lands with higher
25 salinity Colorado River water.

1 I would like to ask a couple questions about that. One
2 is: Are you knowledgeable about what cost the farmer pays
3 for that water, the Colorado River water?

4 MR. WEINBERG: I am knowledgeable on what our
5 agricultural users pay for their water and specifically I
6 have a general sense of what other agricultural users pay
7 for water.

8 MR. DU BOIS: What figure would you use there?

9 MR. WEINBERG: For our farmers in San Diego County?

10 MR. DU BOIS: Yes.

11 MR. WEINBERG: Between \$450 an acre-foot to as high as
12 \$600 or more, depending on what pumping zone, what elevation
13 the agricultural user is at because they have to pay
14 additional fees to pump water.

15 MR. DU BOIS: I thought it was rather high. I didn't
16 realize it was higher than \$600. That is pretty high in my
17 opinion.

18 CHAIRMAN BAGGETT: You will get a chance to make your
19 opinions. Questions, questions here.

20 MR. DU BOIS: How much do you calculate the farmers
21 overirrigate? I believe you testified, somebody, about that
22 just now, but I didn't get the figure.

23 MR. WEINBERG: What I had testified to earlier was that
24 we had done a calculation comparing the textbook-type of
25 irrigation rates for all of the crops in our county to what

1 actually is being used, what the irrigation rate actually
2 is for all the crops. And what we found was that our actual
3 irrigation rate was 28 percent less. So it was more
4 efficient than what the calculated rates were, the
5 standards.

6 MR. DU BOIS: Does that change your opinion about the
7 overuse of water?

8 MR. WEINBERG: I think the reference in my testimony to
9 overuse of water was a historical irrigation and portions of
10 the county that were previously agriculture near the coast
11 where you have a combination of using Colorado River water,
12 which left salts in the ground, and over pumping which
13 brought in seawater intrusion, and the net result was you
14 had an unusable water supply that until recently we've begun
15 to recover and has become a significant portion of supplies
16 in portions of our county.

17 MR. DU BOIS: So it's your opinion that they no longer
18 overuse irrigation water?

19 MR. WEINBERG: In that reference, those areas are no
20 longer agricultural. This was a historic condition. These
21 are along the coastal areas of San Diego County.

22 MR. DU BOIS: Have you advised some of those farmers
23 that they're overirrigating?

24 MR. WEINBERG: We have an agricultural program where we
25 go out, we have a mission resource conservation district, is

1 hired by the San Diego County Water Authority to go out and
2 work with farmers and to look for those kind of conditions
3 where maybe they could be more efficient and recommend ways
4 they can.

5 MR. DU BOIS: I am interested in knowing what kind of
6 reception do you get from the farmers.

7 MR. WEINBERG: Because of price of water they are
8 receptive to doing things. Most of them have implemented
9 water saving types of practices.

10 MR. DU BOIS: I think that is the only question I had
11 for you.

12 Ms. Stapleton, on Page 11 of your testimony, you say
13 that -- your statement here is as a result, IID has agreed
14 and obligated itself to make due with 500,000 acre-feet less
15 per year than it now uses.

16 MS. STAPLETON: Correct.

17 MR. DU BOIS: That does not include the IID transfer,
18 the hundred thousand or hundred ten thousand that they've
19 already --

20 MS. STAPLETON: No, it does include that.

21 MR. DU BOIS: It does include that?

22 MS. STAPLETON: It includes the 1988 Metropolitan/IID,
23 the 200,000 for San Diego, the hundred thousand for
24 Coachella and/or Met and then the almost hundred thousand in
25 the canal linings.

1 MR. DU BOIS: So then the statement at the end of the
2 sentence, "less per year than it now uses," is incorrect?

3 MS. STAPLETON: You are correct. That 110- is actually
4 being conserved today. You are correct, sir.

5 MR. DU BOIS: Thank you.

6 I was concerned. I was not aware that the District had
7 obligated water to that extent. I think that is the only
8 question I have for you. One more question about that.

9 Have you thought any about what affect that is going to
10 have on Salton Sea?

11 MS. STAPLETON: Yes, sir.

12 MR. DU BOIS: What are your conclusions?

13 CHAIRMAN BAGGETT: No objection.

14 MS. STAPLETON: That there are environmental impacts to
15 the Salton Sea which we are presently working with the
16 regulatory agencies to identify what mitigation steps would
17 be necessary to address those.

18 MR. DU BOIS: Thank you very much.

19 CHAIRMAN BAGGETT: Thank you.

20 Mr. Gilbert.

21 MR. GILBERT: Thank you, Mr. Chairman. Just a few
22 short questions to Ms. Stapleton.

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24 //

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1 CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

2 BY MR. GILBERT

3 MR. GILBERT: You testified that you led the San Diego
4 County Water Authority negotiating team, that you were
5 familiar with the agreement.

6 Does the agreement have some prohibitions against
7 following?

8 MS. STAPLETON: Yes, sir, it does.

9 MR. GILBERT: There is a lot of definitions in the
10 agreement. Does there happen to be one to define
11 following?

12 MS. STAPLETON: The only area related to the following,
13 I believe, is under the definition of conserved water, water
14 and right to use water that may be sold, leased, exchanged
15 or otherwise transferred under Section 1011. I believe that
16 is probably the only definition that we apply.

17 MR. GILBERT: Haven't looked at that one recently, but
18 I don't think that one includes following. That permits
19 following, if I am not mistaken, Section 1011?

20 MS. STAPLETON: Right. If I could go on, then. The
21 specific reference to the no following is within another
22 section of the agreement which says that following may not
23 be used for purposes of conservation or to obtain the
24 transfer water between IID and the contracted landowners.

25 MR. GILBERT: I think that satisfies me on that.

1 MS. STAPLETON: It just says IID covenants and agrees
2 that fallowing will not be permitted. A permitted water
3 conservation effort under its contracts with the contracting
4 landowners.

5 MR. GILBERT: But there doesn't appear to be a real
6 definition of fallowing?

7 MS. STAPLETON: You are correct that in the definitions
8 in the front fallowing is not one of them in the agreement.

9 MR. GILBERT: Is it largely then up to IID to ensure
10 that their conservation program is structured in a way so
11 that it conserves water without reducing consumptive use?

12 MS. STAPLETON: Yes. It would be IID's obligation to
13 ensure that they meet this provision of the contract, but it
14 would be the trust, but verify for San Diego. We would want
15 to verify that the contracts, in fact, have this provision
16 within it.

17 MR. GILBERT: Thank you.

18 That is all, Mr. Chairman.

19 CHAIRMAN BAGGETT: Thank you. I just have a couple
20 quick questions on Table 5-1. I don't know if we need the
21 table.

22 ---oOo---

23 CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

24 BY THE BOARD

25 CHAIRMAN BAGGETT: In terms of -- it shows a decrease

1 -- I guess the prior one that is related, showed a decrease
2 in consumption of agricultural usage, that was the previous
3 slide.

4 MR. WEINBERG: Table 2.2.

5 CHAIRMAN BAGGETT: Shows a decrease in agricultural
6 use, and that was, I want to make clear, that was based
7 largely on the land conversion?

8 MS. STAPLETON: Yes, sir.

9 CHAIRMAN BAGGETT: It was not based on conservation by
10 agricultural use?

11 MR. WEINBERG: No, it was based on projections by us,
12 San Diego Regional Government on land use changes.

13 CHAIRMAN BAGGETT: Second question was on 5.1, the
14 other table.

15 Does San Diego County have a 3030 plan, AB 3030,
16 groundwater?

17 MR. WEINBERG: I believe some of our agencies embarked
18 on that. At least two I know started the process. I am not
19 sure if they completed it.

20 CHAIRMAN BAGGETT: You are showing an increase in
21 groundwater use?

22 MR. WEINBERG: These are in a variety of basins where
23 some of these are in the very early planning stages. So I
24 think there is recognition that if some of those projects do
25 move forward, because it has come in some other projects,

1 that they would want to have an AB 3030-type of management
2 plan.

3 CHAIRMAN BAGGETT: So you were looking -- these are by
4 groundwater, then; you are looking for consumptive --
5 looking at integrated groundwater program as opposed to
6 capping?

7 MR. WEINBERG: Groundwater in San Diego is very limited
8 by the geology.

9 CHAIRMAN BAGGETT: Understand.

10 MR. WEINBERG: These numbers represent a variety of
11 some of them or just extraction projects, some of them
12 brackish recovery and some of them are conjunctive use and
13 artificial recharge.

14 CHAIRMAN BAGGETT: Last question on the desalination
15 plan. Is that proposal, you got it down here, 15 years out.
16 Has any work been done on identifying sites, looking at the
17 specifics of that project?

18 MR. WEINBERG: Yes. Actually, we are pursuing that
19 right now. We are looking at a specific site in the
20 northern part of the county in Carlsbad where we believe
21 there may be a potential for 50,000 acre-feet. We're in the
22 middle of feasibility assessment on are there any other
23 potential sites for seawater desalination because we know
24 that is part of the picture in the future.

25 CHAIRMAN BAGGETT: Anybody else?

1 Aqueduct, correct?

2 MS. STAPLETON: Yes, sir.

3 MR. SLATER: If there was not space available in the
4 Colorado River Aqueduct, could you move the water from
5 Imperial to San Diego?

6 MS. STAPLETON: No, we would not be able to.

7 MR. SLATER: Would that render the transfer infirm or
8 unfirm?

9 MS. STAPLETON: Yes.

10 MR. SLATER: Thereby make it unreliable?

11 MS. STAPLETON: Correct.

12 MR. SLATER: Ms. Stapleton, can you explain the
13 difference between an exchange and a wheeling agreement?

14 MS. STAPLETON: Yes. The exchange agreement between
15 San Diego and Metropolitan requires that San Diego basically
16 turn over an amount of water to Metropolitan at its intake
17 on the Colorado River and then alike amount, meaning just
18 that same amount in quantity, would be provided to us at our
19 turnout at the end of the Met pipes in San Diego County. It
20 is radically different than a wheeling agreement for a space
21 available in that we have a firm space in the aqueduct for
22 the length of the exchange agreement. And it is set at a
23 specific price based upon a negotiation between the two
24 agencies.

25 MR. SLATER: So in effect it is different from a Katz

1 Wheeling Law transfer in two regards. One is it is a trade
2 of one supply of water for another. And secondly, it is
3 firm capacity as opposed to space available?

4 MS. STAPLETON: That's correct.

5 MR. SLATER: In a question you received on cross you
6 were asked about whether there was money available for
7 indirect third party or community impacts under the San
8 Diego/IID transfer?

9 MS. STAPLETON: Yes.

10 MR. SLATER: Your understanding -- is it your
11 understanding under the transfer agreement that IID farmers
12 should be able to farm an equivalent amount of land that
13 they farmed previously, before the conservation efforts?

14 MS. STAPLETON: Yes. It was the intent -- it was the
15 desire of IID and San Diego that the agricultural economy
16 not be impacted by this transfer agreement and that they
17 would be able to achieve the same yield as they do presently
18 once the transfer and conservation programs are
19 implemented.

20 MR. SLATER: Was it a material factor in the
21 motivation of San Diego to cover third-party community
22 impacts through the pursuit of funding on-farm or on-farm
23 conservation measures?

24 MS. STAPLETON: Yes.

25 MR. SLATER: So in that regard there would be no need

1 to add additional money or make additional money available
2 under the transfer agreement as it presently exists?

3 MS. STAPLETON: Correct. The amount of the funds that
4 San Diego is willing to pay was an all inclusive amount,
5 which included all of the components you referenced.

6 MR. SLATER: And, finally, the Authority is a signatory
7 to the Secretary Implementation Agreement, correct?

8 MS. STAPLETON: Yes, the Secretarial Implementation
9 Agreement.

10 MR. SLATER: Thank you.

11 No further questions.

12 CHAIRMAN BAGGETT: Any questions by IID on redirect?

13 MR. OSIAS: No.

14 CHAIRMAN BAGGETT: Colorado River.

15 MR. SHEPARD: No.

16 CHAIRMAN BAGGETT: Defenders.

17 MR. FLETCHER: No.

18 CHAIRMAN BAGGETT: Farm Bureau.

19 MR. RODEGERDTS: No.

20 CHAIRMAN BAGGETT: Imperial County.

21 MR. ROSSMANN: No, sir.

22 CHAIRMAN BAGGETT: Mr. Du Bois.

23 Mr. Du Bois, it is limited to the --

24 MR. DU BOIS: I haven't done well in the past, but I
25 will try this time to.

1 CHAIRMAN BAGGETT: Limited to what they just discussed.

2 MR. DU BOIS: My question is on the exchange agreement,
3 is that permitted?

4 CHAIRMAN BAGGETT: Ask it. We'll see. Just ask the
5 question, we'll find out.

6 ---oOo---

7 RE-CROSS-EXAMINATION OF SAN DIEGO COUNTY WATER AUTHORITY

8 BY MR. DU BOIS

9 MR. DU BOIS: Ms. Stapleton, could you tell me for how
10 many years the exchange agreement is effective?

11 MS. STAPLETON: It is effective for 30 years.

12 MR. DU BOIS: What will you do after that?

13 MS. STAPLETON: We will renegotiate, if necessary, the
14 contract with Metropolitan if we are unable to resolve the
15 issue prior to the implementation.

16 MR. DU BOIS: My understanding is that your original
17 agreement with Imperial is for 45 years?

18 MS. STAPLETON: For Phase I of the Imperial agreement
19 is for 45 years.

20 MR. DU BOIS: What would you do if you were unable to
21 reach an acceptable agreement with MWD during that 15-year
22 period between 30 years and 45 years?

23 MS. STAPLETON: Well, let me state that I have every
24 reason to believe that among Metropolitan, Imperial and San
25 Diego that we will be working out an exchange agreement, and

1 the phasing of the water transfer which will be mutually
2 acceptable to all three parties, and that San Diego
3 understands that we have some cleanup to do in that regard
4 and that we expect we will be successful prior to the
5 implementation and execution of the QSA.

6 MR. DU BOIS: Could you explain the basis of your faith
7 that that will be successful?

8 MS. STAPLETON: Yes. That is that we have already had
9 informal discussions with Metropolitan related to the
10 30-year agreement and this 45 year -- the imbalance between
11 the two, as well as had initial discussions with Imperial
12 Irrigation District. And it is those discussions with both
13 parties that has led me to believe that we will be able to
14 resolve the issue.

15 MR. DU BOIS: Is there a fallback position? You have a
16 out in case you fail to reach an acceptable arrangement.

17 MS. STAPLETON: One of the conditions precedent is that
18 San Diego is obligated to have a transportation arrangement
19 prior to the start of the water transfer and conservation
20 agreement with Imperial. That is one of the conditions
21 precedent.

22 If San Diego chooses to move forward, then San Diego
23 would be at risk for that additional 15 years, and that
24 would be our burden.

25 MR. DU BOIS: Is there provision that San Diego could

1 drop out of the agreement in case you don't reach an
2 acceptable price for the exchange agreement?

3 MS. STAPLETON: You mean like we are in year 30 and
4 have been unsuccessful? No, at that point it is our
5 obligation to accept that risk.

6 MR. DU BOIS: You can't drop out of the contract?

7 MS. STAPLETON: My understanding is that we would be
8 unable to drop out of the contract if we have agreed to
9 initiate the water transfer agreement with Imperial and we
10 have accepted that risk.

11 MR. DU BOIS: Is there a provision there that makes
12 Imperial liable for part of the cost of the exchange?

13 MR. SLATER: I am going to object. We are getting
14 beyond the scope of redirect.

15 CHAIRMAN BAGGETT: I think we are getting way beyond.

16 MR. DU BOIS: Thank you.

17 That is all I have.

18 CHAIRMAN BAGGETT: Mr. Gilbert, do you have any?

19 MR. GILBERT: No.

20 CHAIRMAN BAGGETT: That is all the parties.

21 Mr. Slater, do you have anything?

22 MR. SLATER: Thank you.

23 I think very briefly we have completed our case in
24 Phase I. We have previously filed our exhibits. They are
25 all public documents and certified copies. We would at this

1 point move them into evidence along with documents 44 and
2 45, which were used for demonstrative purposes at this
3 hearing.

4 CHAIRMAN BAGGETT: Is there an objection?

5 There is no objection.

6 MR. ROSSMANN: Your Honor, let me look at his list of
7 witnesses. I thought he had more witnesses, but maybe I am
8 wrong.

9 MR. SLATER: We did nominate former Governor Wilson's
10 chief of staff, George Dunn, but we have declined to call
11 him, and we have two witnesses in Phase II.

12 MR. ROSSMANN: Thank you.

13 CHAIRMAN BAGGETT: So accepted into evidence. Let's
14 take a ten-minute break and then we will come back with
15 Colorado Tribes.

16 (Break taken.)

17 CHAIRMAN BAGGETT: Let's continue.

18 Colorado River Indian Tribes.

19 ---oOo---

20 TESTIMONY OF COLORADO RIVER INDIAN TRIBES

21 MR. HANSEN: Thank you, Mr. Chairman.

22 My name is Gary Hansen. I am the water resources
23 director for the Colorado River Indian Tribes, and we are
24 here in support of our position that the protest against the
25 transfer based on significant harm to the tribes' interest

1 be supported.

2 First of all, we do support the proposition that the
3 principal parties have put forward regarding the
4 nonprecedent setting nature of this hearing. So we would
5 like to put that on record. As far as the logistics of how
6 we are going to handle this presentation, I will give a
7 brief testimony that summarizes what I have submitted
8 already, and then I will present questions to our expert
9 power witness, the consultant who does our power work at the
10 Tribe.

11 We will be providing testimony on the fact that the
12 transfer will reduce the amount of power that passes through
13 the Headgate Rock -- the amount of water that passes through
14 the Headgate Rock Power Plant, which is a tribal facility
15 dedicated to the production of power for the Tribes. By
16 doing so this transfer will reduce that value of that power
17 plant to the Tribe, significant reduction.

18 Just for a little background. The Colorado River
19 Indian Tribes is located both in California and Arizona,
20 from about Parker, Arizona, down to the Ehrenberg and
21 Blythe, California area. It comprises about 268,000 acres
22 and it has about 45 miles of river, Colorado River, flowing
23 through it, about 90 miles of collected shoreline on the
24 river.

25 As part of the Tribes' use of that river that is

1 authorized under federal law, the Headgate Rock Dam was
2 authorized under the River and Harbors Act of 1935. The
3 construction was initiated in 1938 by the Bureau of Indian
4 Affairs and was completed in 1941. The dam was designed to
5 provide a permanent diversion for irrigation water to
6 irrigate lands in Arizona, and also the generation of power
7 necessary to irrigate the Indian lands was authorized in the
8 original legislation. The dam is owned by the United
9 States, and it is operated by Bureau of Indian Affairs.

10 In January of 1977, the Colorado River Indian Tribes
11 Tribal Council requested federal assistance in the
12 construction of the hydroelectric dam facility by resolution
13 to the Bureau of Indian Affairs. The purpose of this
14 resolution was to increase the economic development of the
15 Tribe by power production from Headgate Rock Dam. This
16 resolution resulted in the Bureau of Indian Affairs
17 requesting the Bureau of Reclamation in 1980 to do a
18 feasibility study, actually to do a rework of a previous
19 feasibility study on putting a hydroelectric power facility
20 in Headgate Dam.

21 This report anticipated that all the power that could
22 be generated from the powerplant would be used by the
23 Tribe. It would be used on the CRIT Reservoir to operate
24 the irrigation and drainage facilities and to supply a
25 portion of the residential and commercial power requirements

1 on the reservation. This report was the basis of a
2 Congressional appropriation in 1985 under Public Law 99-88
3 for construction of the Headgate Rock Powerplant. This
4 powerplant was subsequently constructed and is in operation
5 today.

6 And now I would like to turn our questioning over to
7 our expert witness, Mr. Leland Gardner and ask him a few
8 questions that I have prepared here.

9 MR. HANSEN: Mr. Gardner, are you testifying about the
10 CRIT -- please state your name for the record? I think we
11 already have that.

12 MR. GARDNER: Leland Gardner.

13 MR. HANSEN: Are you testifying about the CRIT electric
14 and hydropower facilities?

15 MR. GARDNER: I have a question. I haven't been sworn,
16 does that matter?

17 (Oath administered by Chairman Baggett.)

18 MR. HANSEN: Are you testifying about the CRIT
19 electric and hydropower facilities?

20 MR. GARDNER: Yes, I am.

21 MR. HANSEN: Do you have in front of you Colorado River
22 Indian Tribes Exhibit No. 9, the written testimony of Leland
23 Gardner?

24 MR. GARDNER: Yes, I do.

25 MR. HANSEN: Do you adopt that testimony as it is

1 written?

2 MR. GARDNER: Yes.

3 MR. HANSEN: What are your qualifications for that
4 testimony?

5 MR. GARDNER: I have a Bachelor's and Master's degree
6 in civil engineering, am registered as a civil engineer in
7 California. Also have a MBA degree. And I was raised at
8 the powerplant, Colorado River Reservation then, know the
9 history of it, development of the dam and the electric
10 system in the hydroplant.

11 I have been employed by PG&E for a number of years
12 prior to retirement and was responsible for their rate
13 department for several years and have general knowledge
14 about the value of electricity in this part of the country.
15 Presently have been working to advise the Tribe about their
16 electric and other energy facilities.

17 MR. HANSEN: Could you please describe the CRIT
18 facilities and their operation.

19 MR. GARDNER: The electric facilities are operated by
20 the Bureau of Indian Affairs only on the CRIT Reservation.
21 They were built by the Bureau and in some cases they were
22 paid for by federal appropriations. Those federal moneys
23 have been repaid to the federal government by the rate
24 papers on the reservation so that there is presently no debt
25 owed on the electric system.

1 The original service on the reservation was provided
2 through a basic supply from the Western Area Power
3 Administration, supplemented by supplies from Arizona Public
4 Service Company. The Arizona Public Service rates were
5 extremely high, and it was because of that burden that the
6 Tribe asked the federal government to construct the
7 hydroplant.

8 Presently the power is supplied from the Western Area
9 Power Administration and supplemented by the generation at
10 Headgate. The system has a sharp summer peak in June, July
11 and August and is funded entirely by the retail rates that
12 are paid by the ratepayers on the reservation plus
13 supplemental revenues that are now received from surplus
14 sales from the hydroplant. So that there is no external
15 financing at all for the system.

16 MR. HANSEN: Could you please describe the
17 hydroelectric plants itself at Headgate?

18 MR. GARDNER: As you mentioned, the plant was requested
19 in 1977 by the Tribal Council. The federal government had a
20 planning report prepared which resulted in the
21 recommendation that a 19.5 megawatt plant be constructed to
22 produce 86.5 million kilowatt hours per year. That
23 recommendation was adopted by Congress when they funded the
24 plant, and it was funded under a special legislation known
25 as the Snyder Act which is an act intended to provide

1 benefits to Indian tribes. It was subsequently built by the
2 Bureau of Indian Affairs with a design provided by the
3 Bureau of Reclamation and construction also by the Bureau of
4 Reclamation. It's been determined, also because of the
5 Snyder Act funding, that there is no repayment owed to the
6 federal government for the \$55,000,000 cost of that plant.

7 MR. HANSEN: Has the plant operated satisfactorily
8 during its life?

9 MR. GARDNER: Yes. It came into the operation in 1993
10 and except for an accident in 1998 it has operated quite
11 satisfactorily. It has been producing slightly more than
12 the anticipated 86,000,000 kilowatt-hours per year. When it
13 went down in 1998, the Tribal Trust Fund provided about four
14 and a half million dollars to repair it, the money coming
15 from the ratepayers on the reservation. And since its
16 repair, it has been producing very satisfactorily.

17 MR. HANSEN: Thank you.

18 Is the plant a valuable resource for Colorado River
19 Indian Tribes?

20 MR. GARDNER: Yes, it is extremely valuable. The
21 purpose for that plant, one of the basic ones, was to
22 displace the very high cost energy that was being purchased
23 from Arizona Public Service Company, and it has certainly
24 displaced all of those expensive kilowatt-hours. It meets
25 the Congressional expectation for producing 86,000,000

1 kilowatt-hours per year and it in addition allows the system
2 to meet the heavy peak requirement in those three summer
3 months, June, July and August.

4 In addition, it is presently producing some surplus
5 kilowatt-hours for sale, and those kilowatt-hours are going
6 into the Tribal Trust Fund to help stabilize the retail
7 rates on the reservation. Overall, in my judgment, it is an
8 extremely valuable resource for the CRIT Tribes.

9 MR. HANSEN: Thank you.

10 Would the proposed IID/San Diego County Water Authority
11 transfer reduce the plant's value to the Tribes?

12 MR. GARDNER: Yes, it certainly would. The Bureau of
13 Reclamation EIS estimated that the impact of that transfer
14 would be up to 400,000 acre-feet per year. And based on
15 that assumed reduction and also based on the Bureau of
16 Reclamation estimate of value of energy, some 5.2 million
17 kilowatt-hours would be lost every year or about 6 percent
18 of the expected production from the plant. And valuing that
19 at four cents, it's a loss of about \$200,000 every year.
20 And the 6 percent looked at in another way, over a term of
21 75 years means that the plant would effectively shut down
22 for a space of four and a half years.

23 So it's a very significant loss of something that has
24 been troublesome to the Tribal Council.

25 MR. HANSEN: Mr. Gardner, you mentioned a figure of

1 400,000 acre-feet per year. Could you explain that figure
2 and the relation of it to the 200,000 acre-feet per year
3 transfer that is being spoken about in this hearing?

4 MR. GARDNER: Yes. As I mentioned, the 400,000
5 acre-feet figure was derived from the Bureau of Reclamation
6 environmental impact notices. And here in this proceeding
7 the transfer that's been discussed is 200,000 acre-foot
8 level. So it's a difference there.

9 Yesterday when the Imperial witness estimated the
10 impact at Headgate, he based his figure of 3 percent loss on
11 the 200,000 acre-foot level. My figure is 6 percent based
12 on 400,000 acre-foot level. But the arithmetic it is
13 consistent. The numbers are different because they came
14 from different sources.

15 MR. HANSEN: Mr. Gardner, the witness yesterday for
16 Imperial mentioned that the fluctuation in the river up and
17 down was a factor that he seemed to be saying negated the
18 relevance of the loss to the powerplant.

19 What is your opinion of that?

20 MR. GARDNER: I failed to see any relevance. The plant
21 is a run of the river plant which means that it runs
22 whenever the river runs. The river doesn't run as much this
23 year as last year. There is a natural variation. That has
24 nothing to do with the withdrawal of water and delivery
25 transfer.

1 MR. HANSEN: Thank you.

2 Mr. Gardner, could this loss be mitigated or
3 compensated for?

4 MR. GARDNER: Yes, I believe it can be. In the context
5 of these proceedings or in the transfer proceeding that is
6 being considered here, it appears that the transfer parties
7 could mitigate this loss as a part of their transfer
8 transaction, and that in some kind of negotiation with CRIT
9 we can certainly reach a mitigation formula that would be
10 satisfactory to everybody.

11 MR. HANSEN: Thank you, Mr. Gardner.

12 I think we are complete.

13 CHAIRMAN BAGGETT: Thank you.

14 Have any questions?

15 MR. OSIAS: I do.

16 Thank you.

17 I'm wishing now I had down my training session at
18 lunch. Is there a way to call up their exhibits on the
19 screen? I am interested primarily in Exhibit 2 and Exhibit
20 5.

21 CHAIRMAN BAGGETT: While we are waiting for this, let's
22 take a break from the cross, while setting that up and see
23 what the plan is, what people want to do today.

24 Off record.

25 (Break taken.)

1 CHAIRMAN BAGGETT: Back on the record.

2 Let's continue.

3 ---oOo---

4 CROSS-EXAMINATION OF COLORADO RIVER INDIAN TRIBES

5 BY IMPERIAL IRRIGATION DISTRICT

6 BY MR. OSIAS

7 MR. OSIAS: Good afternoon, Mr. Gardner. I am David

8 Osias. I am here on behalf of Imperial Irrigation

9 District.

10 Were you here yesterday and for the testimony of other
11 witnesses?

12 MR. GARDNER: Yes.

13 MR. OSIAS: The Colorado River Indian Tribes have the
14 right to order water from Lake Mead for diversion into the
15 reservation lands; is that correct?

16 MR. HANSEN: Yes, that is right.

17 MR. OSIAS: Did you hear the description of how
18 Imperial submits its order in advance, then the water
19 comes?

20 MR. HANSEN: Yes.

21 MR. OSIAS: Is it the same situation for the Colorado
22 River Indian Tribes?

23 MR. HANSEN: Yes.

24 MR. OSIAS: The water that is ordered by the Colorado
25 River Indian Tribes when it is diverted, does it generate

1 power like within Imperial where they put power plants on
2 the canal structures?

3 MR. HANSEN: No, we have no power facilities on the
4 canal structures.

5 MR. OSIAS: The Headgate Rock Dam is in the river then
6 and not part of the canal system that generates power,
7 correct?

8 MR. HANSEN: Yes, that's right.

9 MR. OSIAS: One of its purposes is to allow water to
10 leave the river through a diversion facility and get into
11 the reservation?

12 MR. HANSEN: Yes.

13 MR. OSIAS: You have offered no evidence that the
14 transfer that is proposed would in any way interfere with
15 the diversion of water into the reservation; isn't that
16 correct?

17 MR. HANSEN: That is correct.

18 Let me add a little to that. The diversion at
19 Headgate Powerplant, the Headgate headworks for our
20 irrigation system, we don't believe would be affected.

21 MR. OSIAS: Thank you. This is what I meant by my
22 question.

23 Maybe I will follow up on a question that staff counsel
24 asked yesterday of Dr. Mesghinna.

25 If you had in the past been ordering, hypothetically,

1 80,000 acre-feet and in the future you wanted to order a
2 hundred, you would just increase your order, and it would be
3 released from Hoover Dam?

4 MR. HANSEN: Yes, that's right.

5 MR. OSIAS: The fact that this transfer is going on
6 would not affect that direct?

7 MR. HANSEN: That's right.

8 MR. OSIAS: Turning to the powerplant, let me ask Mr.
9 Gardner, the Colorado River Indian Tribe has no right to
10 order water to be released from Lake Mead to run the
11 powerplant; is that correct?

12 MR. GARDNER: I believe you are correct, yes.

13 MR. OSIAS: If someone else orders water to be released
14 from Lake Mead it will flow by or through the plant,
15 whatever the right verb is, correct?

16 MR. GARDNER: Yes.

17 MR. OSIAS: So yesterday if you look behind you -- I
18 was informed I should know the exhibit number for this by
19 now.

20 This is the history of Imperial's water use and
21 diversions from 1914 through 2000. You saw us using this.
22 It is IID Exhibit 11.

23 Did you see this yesterday and hear the discussion
24 about it?

25 MR. GARDNER: I believe so, yes.

1 MR. OSIAS: And maybe you were here when Dr. Smith and
2 others noted that in 1992 -- do you see along the bottom
3 axis 1992?

4 MR. GARDNER: Yes.

5 MR. OSIAS: There is a big dip there in the diversion.
6 Do you see that?

7 MR. GARDNER: Yes.

8 MR. OSIAS: IID diverted 500,000 acre-feet less or
9 more, maybe 600,000, than that year before.

10 Do you see that?

11 MR. GARDNER: Yes.

12 MR. OSIAS: You heard that was because of white fly
13 infestation. Did you hear that testimony yesterday?

14 MR. GARDNER: I believe so, yes.

15 MR. OSIAS: Now, in 1993 the Colorado River Indian
16 Tribe didn't send a bill to Imperial for lost power
17 production, did it?

18 MR. GARDNER: No.

19 MR. HANSEN: No.

20 MR. OSIAS: And has not since, correct?

21 MR. HANSEN: That's correct.

22 MR. GARDNER: That's right.

23 MR. OSIAS: Because it has no right to cause any volume
24 of water to be diverted by Imperial, correct?

25 MR. GARDNER: That's right.

1 MR. OSIAS: The Headgate Rock Dam is owned by the
2 United States Government; is that right?

3 MR. HANSEN: That is correct, yes. It is a trust
4 asset.

5 MR. OSIAS: But title is in the government's and
6 Bureau of Indian Affairs operates it?

7 MR. HANSEN: Yes.

8 MR. OSIAS: And the water that flows through the dam
9 and through the powerplant equals the amount of water
10 flowing below Parker Dam minus the diversion into the
11 Colorado River Indian Tribe main canal; is that correct?

12 MR. HANSEN: Yes.

13 MR. OSIAS: If you're comfortable answering, whichever
14 is fine.

15 If the Colorado River Indian Tribe diverted less water
16 into the canal after it ordered it from Lake Mead, it would
17 have more power to produce, correct?

18 MR. HANSEN: Yes.

19 MR. OSIAS: It just doesn't have the right to do that?

20 MR. HANSEN: Right.

21 MR. OSIAS: Isn't it also correct that power generation
22 is last in priority with respect to Colorado River
23 operations?

24 MR. HANSEN: I believe that is the case. But I was
25 wondering if that is in one of the exhibits here.

1 MR. OSIAS: In fact, it is in Exhibit 5, Page 3.3S1.

2 Do you want to see that?

3 MR. HANSEN: I believe it.

4 MR. OSIAS: And isn't it also correct that all releases
5 from Parker Dam or below Parker Dam are in response to
6 downstream water orders or reservoir regulation
7 requirements?

8 MR. HANSEN: Could you repeat that?

9 MR. OSIAS: All releases from Parker Dam are in
10 response to either downstream water right orders or
11 reservation regulation requirements?

12 MR. HANSEN: Yes.

13 MR. OSIAS: And Headgate Rock Dam is a run of the river
14 powerplant? I think you testified to that on direct. Which
15 means whatever water happens to be in river is the only
16 water that is available for generating power, correct?

17 MR. HANSEN: Right.

18 MR. OSIAS: The Bureau of Reclamation did a Draft
19 Environmental Impact Statement on the implementation
20 agreement which is the Secretary Implementation Agreement
21 related to QSA, correct?

22 MR. HANSEN: Yes.

23 MR. OSIAS: You submitted that as Exhibit 5, part of
24 it?

25 MR. HANSEN: Yes.

1 MR. OSIAS: The Bureau determined there may be a 5.37
2 percent power generation loss, correct?
3 MR. GARDNER: Yes, approximately.
4 MR. OSIAS: That is on Page 3.3-13 of Exhibit 5, if
5 you'd like to see it. If you have that handy, maybe I won't
6 bother to put that up.
7 MR. GARDNER: Yes.
8 MR. OSIAS: And they concluded that no mitigation for
9 power loss is necessary; isn't that correct?
10 MR. HANSEN: That's right. We don't agree with that
11 determination, though.
12 MR. OSIAS: I'm merely asking that question to inform
13 the Board of what their conclusion was.
14 I have no further questions.
15 CHAIRMAN BAGGETT: Thank you.
16 San Diego.
17 MR. SLATER: San Diego waives.
18 CHAIRMAN BAGGETT: Defenders.
19 MR. FLETCHER: We waive.
20 CHAIRMAN BAGGETT: County of Imperial.
21 MR. ROSSMANN: We waive.
22 CHAIRMAN BAGGETT: Farm Bureau.
23 MR. RODEGERDTS: No.
24 CHAIRMAN BAGGETT: You waive?
25 MR. RODEGERDTS: Yes.

1 CHAIRMAN BAGGETT: Mr. Du Bois and Mr. Gilbert?

2 MR. GILBERT: None.

3 CHAIRMAN BAGGETT: Staff. I have none.

4 ---oOo---

5 CROSS-EXAMINATION OF COLORADO RIVER INDIAN TRIBES

6 BY STAFF

7 MS. DIFFERDING: Do you take the water or do you
8 generate power under a contractual entitlement with the
9 Bureau of Reclamation, or do you claim water rights? If you
10 claim water rights what type of right do you claim for the
11 generation of hydropower?

12 MR. HANSEN: We generate the power based on the run of
13 the river. That is how the powerplant was designed and
14 authorized and how the financial determinations were
15 determined for its payback by the Bureau of Reclamation. We
16 would get the power that would be generated from the run of
17 the river. That is our right.

18 As far as a water right, we have water rights that are
19 separate from that. But this particular right to generate
20 power off the river is part of the Congressional law that
21 authorizes us to have a powerplant and to get the power from
22 the river run.

23 MS. DIFFERDING: Thank you.

24 CHAIRMAN BAGGETT: Other questions.

25 Do you have any redirect, anything else you want to say

1 in response to the questions asked?

2 MR. HANSEN: I will say it right here.

3 CHAIRMAN BAGGETT: You can respond to questions asked
4 by Mr. Osias.

5 REDIRECT BY COLORADO RIVER INDIAN TRIBES

6 MR. HANSEN: I have a couple thoughts. The CRITS have
7 reviewed the Bureau of Reclamation's analysis of their -- of
8 the impact that will occur from the various transfers that
9 are proposed, and we have prepared and are still preparing
10 responses to their claims in their Environmental Impact
11 Statement. Their claims -- we disagree with several of
12 their claims, including the fact that the power is not a
13 trust asset because we believe there is ample proof that it
14 is. And also their claim regarding their ideas about why we
15 should not get compensation for our power.

16 This is a major issue between us and the Bureau of
17 Reclamation. This will not be the first time that they have
18 made claims that were later changed.

19 CHAIRMAN BAGGETT: Any cross?

20 Thank you.

21 I assume you want to move your exhibits into evidence?

22 MR. HANSEN: Yes, we'd like to move our exhibits into
23 evidence.

24 CHAIRMAN BAGGETT: Objection?

25 So entered.

1 Thank you.

2 MR. HANSEN: Thank you, Mr. Chairman.

3 CHAIRMAN BAGGETT: Thank you.

4 Is the Farm Bureau ready for your case in chief?

5 MR. DU BOIS: Absolutely not.

6 CHAIRMAN BAGGETT: I asked the Farm Bureau first.

7 MR. DU BOIS: I had anticipated being on next

8 Monday, and I absolutely am not ready. But I'll go if you

9 say so.

10 MR. RODEGERDTS: He's asking if the California Farm

11 Bureau Federation goes first, you see, in this endeavor.

12 CHAIRMAN BAGGETT: We can wait till Monday.

13 MR. RODEGERDTS: If we can wait till Monday that is

14 fine. If you want me to go forward, I will put on

15 California Farm Bureau's case in chief, sort of explain what

16 this triage is doing here sitting throughout. But if we can

17 defer --

18 CHAIRMAN BAGGETT: You would rather go as a panel on

19 Monday?

20 MR. RODEGERDTS: Not a panel, sort of a hybrid panel.

21 CHAIRMAN BAGGETT: Panel of farmers, being a rural

22 guy.

23 MR. RODEGERDTS: Unadulterated by all this proceeding.

24 CHAIRMAN BAGGETT: We will wait until 10:00 Monday

25 morning for the Farm Bureau, et al., to present the final

1 case in chief and two witnesses.

2 MR. RODEGERDTS: We appreciate the Board's
3 consideration and those who are here.

4 CHAIRMAN BAGGETT: Our goal will be to try to finish
5 during that morning. It appears, based on the way it is
6 going, that we can, which would give people the afternoon to
7 prepare for Tuesday, and give the Court Reporter a chance to
8 try to get her set of transcripts out sooner.

9 So then we can start Tuesday. Do we still want to try
10 to start at 8:00 and see how far we can get or rather wait
11 until nine? I'll leave that to the parties at this point.

12 MR. OSIAS: Mr. Chairman, I'm certainly willing to work
13 at eight. My concern would be that we may not have all the
14 constituents who will show up for Phase II here today. You
15 notice Sierra Club wasn't here, et cetera. They may think
16 it is nine. It may not be effective for us to show up at
17 eight.

18 CHAIRMAN BAGGETT: I would just as soon make it nine if
19 that is the way it is going. I know a few of you are
20 driving some distances every morning, too. Let's start 9:00
21 Tuesday. That is what is noticed?

22 MR. RODEGERDTS: Monday at ten?

23 CHAIRMAN BAGGETT: Monday is 10:00 is what was noticed.
24 We will go straight through and try to get done before lunch
25 on Monday.

1 Tuesday we will start at nine. I think Tuesday and
2 Wednesday, looking at Wednesday and Thursday, just looking
3 at the schedule as I've got before me and the numbers of
4 witnesses and the time, I would certainly by Wednesday like
5 to get the Regional Board which then basically leaves for
6 the week of the 13th, the Defender of Wildlife, et al.,
7 which is five panel of witnesses and the County of Imperial
8 and Larry Gilbert. So all goes well, we have the entire
9 week of the 13th booked, and I hope we can wrap it up then.

10 MR. OSIAS: There were -- I had a previous commitment
11 on Friday of that week.

12 CHAIRMAN BAGGETT: Maybe we will be done by Friday.

13 MR. OSIAS: We will do our best.

14 MR. FLETCHER: I understand that you don't have a
15 crystal ball, you can't see how Phase II will be any more
16 certainly than the rest of us. Is it your anticipation
17 that the coordinated case of the environmental groups would
18 hang over until the week of the 13th because I was actually
19 thinking we may go the first and have been telling my folks
20 that.

21 Just asking for your guess not --

22 CHAIRMAN BAGGETT: Judging on how it is going and we
23 have IID and San Diego up on the 30th for sure, that is
24 given the time you've requested, I don't see those as being
25 critically lengthy. The Indian Tribes are that day, which

1 --

2 that won't be lengthy.

3 MR. OSIAS: I think the cross, depending on what the
4 environmental agencies do, the cross of Imperial, for
5 example, may be far lengthier in that phase than it was in
6 this phase.

7 CHAIRMAN BAGGETT: As authors of the EIR, it might take
8 a while.

9 MR. OSIAS: The environmental community may know better
10 than me. Their directed admitted -- the cross is --

11 CHAIRMAN BAGGETT: I know that.

12 MR. FLETCHER: That is helpful.

13 CHAIRMAN BAGGETT: Partly up to you and Mr. Rossmann
14 and whether you plan on lengthy cross-examination of the EIR
15 consultants, which could -- my feeling is we'll push and try
16 to get through.

17 MR. SLATER: It's at least a day.

18 CHAIRMAN BAGGETT: If we can get through Mr. Gruenberg
19 by the end of the first, we will be doing well. I would
20 certainly like to at least get through those so then we can
21 start out fresh with your entire case on the 13th.

22 MR. FLETCHER: I appreciate all your efforts to gauge
23 time.

24 CHAIRMAN BAGGETT: Given the number of witnesses you
25 have, I'm comfortable, if the parties have no objection,

1 just saying we will not have your case in chief prior to
2 Monday the 13th, at 9:00. We will start on Monday the 13th,
3 we will say they won't have their witnesses here prior to
4 that. I don't think we are going to do them next Tuesday
5 and Wednesday.

6 MR. FLETCHER: I can only speak for Defenders, but the
7 information is helpful. So I will return to you on Monday.

8 CHAIRMAN BAGGETT: If you can relay that and get back
9 Monday, I think that the 13th is safe to say PCL, Defenders,
10 your consolidated cases in chief, we can plan on starting
11 that on the 13th the earliest.

12 MR. FLETCHER: That is very helpful.

13 CHAIRMAN BAGGETT: Don't have them show up.

14 MR. FLETCHER: Thank you very much.

15 CHAIRMAN BAGGETT: With that, 10:00 Monday morning
16 right here.

17 (Hearing adjourned at 3:30 p.m.)

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